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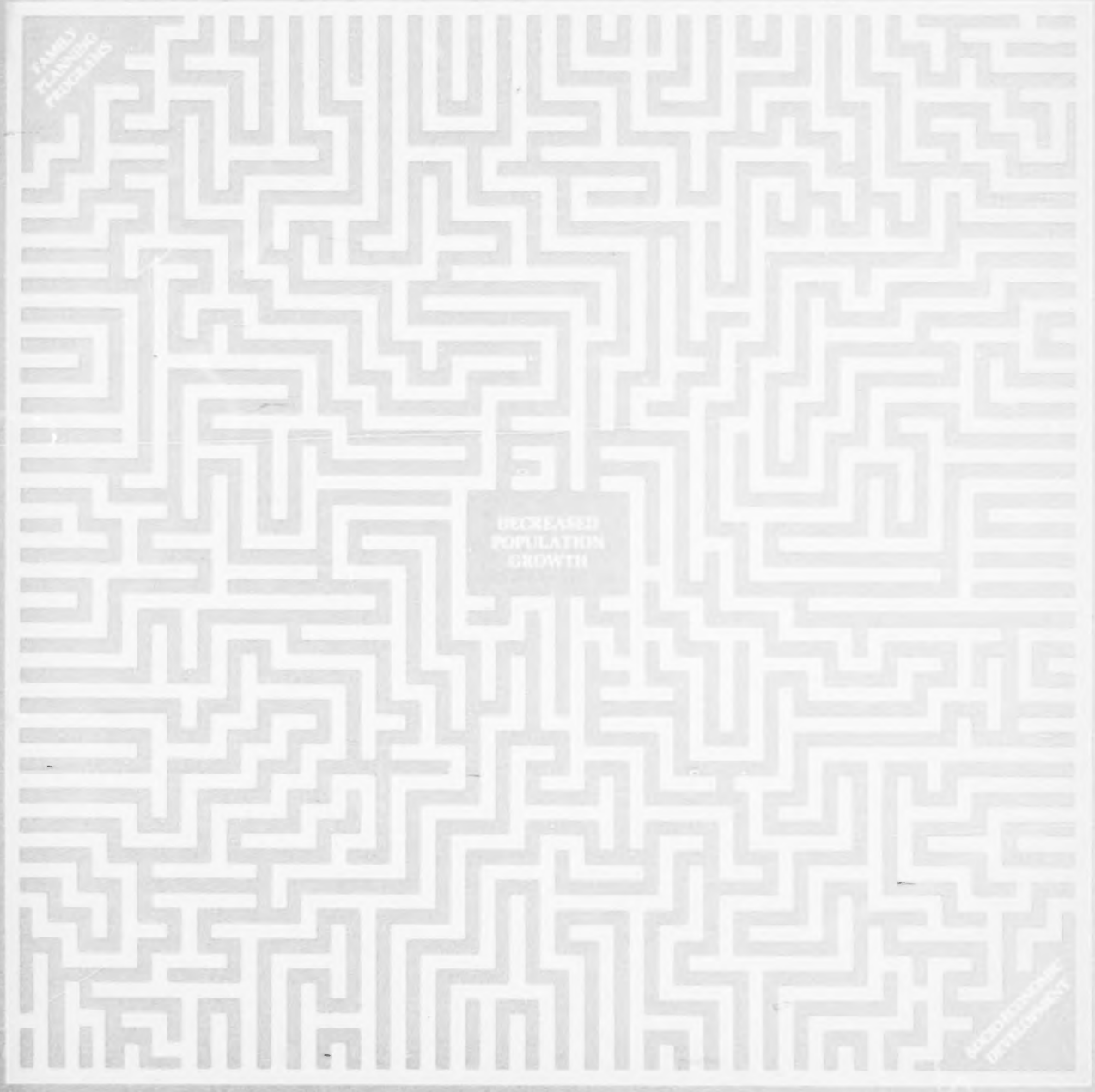
The Great Debate on Population Policy Revisited



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In This Issue

The Great Debate on Population Policy Revisited

Fifteen years ago, in 1975, Bernard Berelson, then president emeritus of The Population Council, published "The Great Debate on Population Policy: An Instructive Entertainment" as a working paper of The Population Council. In 1988, the paper was included in *Berelson on Population*, a collection of 14 Berelson essays that was edited by John A. Ross and W. Parker Mauldin and published by Springer-Verlag.

The "debaters" (FamPlan, DevDev and AcCrit) were prototypes of three views of public policy on population, representing supporters of family planning programs, proponents of development and academic critics.

To reread "The Great Debate" in 1990 makes one marvel anew at Berelson's ability, as he put it, "to distill the argumentation to essentials." It also makes one wonder at how constant and intractable the same old problems seem to be, even in a very different world.

On invitation, three brave researchers agreed to assume the roles of the three prototypes and update them. Using their own words and referring to the considerable scholarship between 1975 and 1990, they have taken on the original questions: Are family planning programs the answer to the population problems of the world? Is economic and social development? What does academic research have to contribute to these issues? How do they relate to each other?

Shireen J. Jejeebhoy, former head of research and evaluation of the Indian Family Planning Association and now a population and social sciences consultant in Bombay, reflects on FamPlan. Allen C. Kelley, James B. Duke Professor of Economics at Duke University, updates DevDev. Geoffrey McNicoll, professorial fellow at The Australian National University, represents AcCrit.

To set the stage, we reprint the original Berelson piece in its entirety, with the kind permission of The Population Council and in warm memory of a bold and insightful scholar-pragmatist.

It is up to the reader, after partaking of this instructive entertainment, to decide who wins the debate.

— Olivia Schieffelin Nordberg

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Editorial Office:
111 Fifth Avenue
New York, N.Y. 10003
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UPDATE

Female Children Not Wanted

At hospitals in one area of India, male infants are being born at rates far higher than normal—an indication, according to investigators, that prenatal sex determination and subsequent induced abortion are being used to prevent the birth of females.[1] According to an analysis of secondary sex ratios at hospitals in Ludhiana (a major industrial city in Punjab state) between 1981 and 1988, the male-female ratio of births in 1981 and 1982 was about 105 per 100, virtually the same as throughout the world. However, the secondary sex ratio jumped to 113 per 100 in 1983, and by 1988 it had risen to almost 122 per 100. According to the investigators, an Indian study recently found that 7,999 of 8,000 abortions performed in Bombay after prenatal sex determination were of female fetuses. They observe that the rise in secondary sex ratios that began in 1983 coincided with the opening of the first prenatal sex-testing centers in Punjab.

1. R. K. Sachar et al., "Sex Selective Fertility Control—An Outrage," *Journal of Family Welfare*, Vol. 36, No. 2, 1990, p. 30.

Birth Control from Hairdressers

Dominican women who want contraceptives can now avoid crowded clinics and get the methods they need from their local hairdresser.[1] Through the efforts of a family planning network formed in 1988 in Santo Domingo, local clinics now provide operators of selected beauty shops with contraceptives (such as oral contraceptive cycles and vaginal spermicides) for one peso each; the hairdressers may then sell the methods to their clients for two pesos each. By the start of 1990, almost 200 hairdressers were taking part in the project, and during 1989 they had recruited more than 5,000 new family planning users in Santo Domingo. The beauticians all received special training in family planning, human sexuality and reproduction, and were instructed to refer women to a local community clinic for pill follow-up or IUD insertions. Officials believe that local women appreciate the program because the beauty shops are more accessible and discreet than family planning clinics, while the hairdressers report that the additional income is significant and that their business is better because they are attracting more customers.

1. "Enterprise in the Dominican Republic: Hairdressers Dispense Contraceptives and Information on Family Planning," *Family Planning Enterprise*, John Snow, Inc., Arlington, Va., August 1990, p. 1.

Inert IUDs Linked to PID

Women using an inert, nonmedicated IUD (i.e., one that releases neither copper nor progestin) are three times as likely as nonusers of contraceptives to be referred to a hospital for treatment of pelvic inflammatory disease (PID) and are more than seven times as likely to be referred for acute PID, according to data from a long-term British study of contraceptive use among more than 17,000 women.[1] Users of copper and progestin devices showed a relatively smaller increased risk of PID, but it was not statistically significant. Women relying on the pill, the diaphragm or female sterilization had a reduced risk of PID compared with women who used no method, although only in the case of the pill was the reduction (by 50 percent) statistically significant. The investigators conclude that their study offers strong evidence "that hospital referral for pelvic inflammatory disease is about twice as high in users of the older nonmedicated [IUDs] as in users of the modern medicated devices."

1. H. Buchan et al., "Epidemiology of Pelvic Inflammatory Disease in Parous Women with Special Reference to Intrauterine Device Use," *British Journal of Obstetrics and Gynaecology*, 97:780, 1990.

One Size IUD Fits All

The Mahua ring, the most widely used IUD in China, comes in seven different sizes, but recent research indicates that one size works just as well as seven.[1] Among a group of 800 women, 400 had their uterus measured and were fitted for the "correct" size of IUD, while the other 400 simply had the 21-mm. ring inserted. After two years of follow-up, rates of pregnancy, expulsion, removal because of bleeding, and continuation were no different among those who were fitted than among those who used the 21-mm. IUD. The investigators observe that if just one size of Mahua ring were offered, insertion of the device would be simplified, the expense of providing it reduced and the responsibilities of the doctors and nurses who fit IUDs lessened. "It is suggested," they conclude, "that the No. 21 Mahua ring may be inserted instead of [the other sizes]."

1. Q. L. Juan et al., "A Randomized Comparative Study of the Performance of Seven Different Sizes of the Mahua Ring Inserted Following Measurement of the Uterine Cavity and One Size of the Same Ring," *Contraception*, 42:391, 1990.

The Low-Dose IUD

A five-year evaluation of a low-dose levonorgestrel-releasing IUD (the LNg 20) shows the device to be as effective as the most advanced Copper-T IUD (the TCu 380-Ag), although the hormonal device has a lower continuation rate.[1] The LNg 20 releases approximately 20 mcg of levonorgestrel each day (about one-third the amount released by the only current hormonal IUD). It was tested along with the TCu 380-Ag in a randomized, multicenter clinical trial involving more than 2,200 women. Life-table analysis revealed that over the first five years of use, failure rates for the LNg 20 and the TCu 380Ag were 1.1 and 1.4 pregnancies per 100 us-

ers; expulsion rates were significantly greater among users of the LNg 20 (11.8 per 100) than among users of the TCu 380Ag (7.4 per 100). The greatest difference between the devices, though, was in the women's experience of amenorrhea—rates of 19.7 per 100 and 0.4 per 100, respectively. However, users of the LNg 20 were significantly less likely than TCu 380Ag users to discontinue method use because of bleeding or pain (15.4 per 100 vs. 23.3 per 100). The continuation rate after five years was significantly lower among LNg 20 users (33.0 per 100) than among TCu 380Ag users (40.6 per 100). The investigators observe that the five-year cumulative pregnancy rates for both devices are lower "than have been reported in long-term randomized comparative trials for any reversible method of contraception."

1. I. Sivin et al., "Long-Term Contraception with the Levonorgestrel 20 Mcg/Day (LNg 20) and the Copper T 380Ag Intrauterine Devices: A Five-Year Randomized Study," *Contraception*, 42:361, 1990.

African Fertility Decline Still Elusive

Fertility remains high in Africa, according to a World Bank analysis of recent data from the region, and while fertility decline may have begun recently in Botswana, Kenya and Zimbabwe and (perhaps) among urban women in Senegal, there has been little sign of change elsewhere on the continent.[1] Desired fertility varies little by subgroup except among the most highly educated urban residents, and even their fertility expectations are far higher than those of comparable elites in other regions of the developing world. Furthermore, according to the World Bank report, low levels of contraceptive use generally reflect low demand for family planning, not a shortfall in supply: "Significant unmet demand may be found among young unmarried women," the report's authors contend, "but there is little evidence of a desire for increased fertility control among older married women." The authors observe that despite the amount of research conducted in Sub-Saharan Africa in the 1980s, "very little is known with certainty about the determinants of fertility" there. The report concludes that further research in Africa should provide "substantial insight" into potential policy options, especially research using recently collected data on social and economic variables. Indeed, they argue that new research approaches are imperative: "Inappropriate policy choices based on untested assumptions about the determinants of African fertility could well have an adverse effect on economic growth well into the next century."

1. E. van de Walle and A. D. Foster, *Fertility Decline in Africa: Assessment and Prospects*, World Bank Technical Paper No. 125, Washington, D.C., 1990.

Pill Policy Changed in Senegal

Requiring potential users of oral contraceptives to first obtain a number of laboratory tests, including Pap smears, blood tests and urine analyses, is unnecessary and does not help to identify women with contraindications to pill use, according to a recent research project in Senegal.[1] The project analyzed the impact of such tests among 410 women; the laboratory results indicated that 20 women had potential health problems, but among the nine women who could be retested, a problem (a high blood-glucose level) could be confirmed in only one. Meanwhile, normal clinical examinations conducted among the same women revealed that just five women had health problems that would preclude pill use, and only one of these women was among the 20 singled out by the laboratory tests. As a result of a conference evaluating these and other findings, the government of Senegal has dropped its policy requiring the laboratory tests, which had limited access to the pill because the tests were available only in the capital, Dakar, and were expensive.

1. "Senegal Changes OC Testing Policy," *Network*, Vol. 11, No. 3, Family Health International, Research Triangle Park, N.C., 1990, p. 19.

Limited Gains in Reproductive Rights

Many of the articles in the United Nations (UN) Convention on the Elimination of All Forms of Discrimination Against Women deal explicitly with reproductive rights, including the availability of contraception and abortion, the accessibility of divorce, and equality of legal marriage age. In the 10 years since the convention was introduced, 103 of 159 UN members have ratified it, yet according to the International Planned Parenthood Federation (IPPF), many women who live in countries that ratified the convention have not yet benefited from it.[1] Only six countries—Cuba, Denmark, Finland, Iceland, Norway and Sweden—are judged to have an excellent reproductive rights record. Bangladesh, Brazil, Egypt, France, Iraq, Ireland, Libya, South Korea, Thailand, Tunisia, Turkey and the United Kingdom have ratified the convention but have entered some reservation about its articles relating to family planning or family law. Further, many developing countries have ratified the convention but still have laws or regulations that contravene the convention, such as limitations on the availability of sterilization (as in Angola, Argentina, Bolivia, the Congo, Libya, Rwanda and Uruguay) or the requirement of either spousal consent or the consent of a committee for a woman to be sterilized (as in Bangladesh, Brazil, Burkina Faso, Chile, Colombia, Costa Rica, Cyprus, Egypt, El Salvador, Ghana, Guatemala, Guinea Conakry, Honduras, Indonesia, Iraq, Kenya, Korea, Laos, Liberia, Mali, Mauritius, Mexico, Panama, Peru, the Philippines, Senegal, Sri Lanka, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda and Zambia). The IPPF notes that "everywhere, social, structural and economic realities limit women's choices and their economic rights. But the establishment of reproductive rights by law is a crucial starting point from which women may begin to exercise those rights."

1. International Planned Parenthood Federation, "Reproductive Rights: How Signatories to the United Nations Convention on the Elimination of All Forms of Discrimination Against Women Are Measuring Up," wallchart, London, 1990.

HIV and the Spread of Tuberculosis

Among 346 patients visiting a hospital clinic in Lusaka, Zambia, for treatment of tuberculosis, 60 percent (56 percent of the men and 64 percent of the women) proved to be infected with the human immunodeficiency virus (HIV).[1] Among men, HIV infection levels were highest for 25–34-year-olds (68 percent), but among women the infection rate was highest for 14–24-year-olds (74 percent). Patients who were better educated and better housed, were widowed or divorced and had been treated for sexually transmitted diseases were significantly more likely to be infected with HIV. Those with pleural or pericardial tuberculosis were far more likely to be HIV-infected than were those with pulmonary tuberculosis (81 percent and 84 percent vs. 49 percent). Thirty-seven percent of those with pulmonary tuberculosis who were HIV-infected had a negative sputum smear for tuberculosis, compared with just 18 percent of those not infected with HIV. Examination of sputum smears "has long been a cornerstone in the diagnosis of [pulmonary] tuberculosis," the investigators observe, but in the presence of HIV infection, the sputum smear may be unreliable.

1. P. A. M. Elliott et al., "Impact of HIV on Tuberculosis in Zambia: A Cross-Sectional Study," *British Medical Journal*, 301:412, 1990.

The Great Debate on Population Policy: An Instructive Entertainment

"The debate seems to be . . . most needed on what the proper policy issues really are. And complicating the resolution is the normal sight-line of the planner and intellectual as against the operator—the long-term versus the short-term."

By Bernard Berelson

Preface

This paper is a debate among three positions intended as prototypic. On any matter as complicated as population policy, there are probably as many positions as there are participants. Hence no one is likely to feel fully represented in this (or any other) typology: "That's not the way I see it." Several other prototypic participants could have been included, but I have made a conscious effort to incorporate various subpositions intended to reflect the breadth if not the richness of the debate. If some qualification is lost, that is after all the essence of prototypes—and, it must be added, public policy as well, where the decision-maker takes what he can from the contending parties.

In order to maximize faithful representation, the debate utilizes actual statements from the literature that has built up in recent years. That literature is quite large, so the selections are illustrative only, and in a double sense: There is much more where they came from and there are many more participants. In any case, no individual's view should be confused with that of the debater here who borrows his argument: Individuals speak for themselves. Nor is there any reason to identify organizations with these prototypes: The major population organizations are all characterized by internal debate on these same issues, indeed accommodate the three debaters within.

I believe the main themes are here, given expression by their own advocates, and I trust that the content truly and fairly illustrates the present state of the discourse. The discussion does tend to concentrate on the dominant current strategies, and hence the debate is a little lopsided since the major actor tends to defend his efforts against the criticisms of the others. But that too is the way it is, perhaps inevitably in such situations.

I have taken the liberty of eliminating what would have been a jarring profusion of quotation marks, so frequent are the attributions. In virtually all cases, the passage preceding a numbered reference is verbatim from the indicated source; the beginning of the quotation is marked by the symbol ~. In the few cases where no symbol appears, the referenced passage is a paraphrase. Nowhere, to the best of my knowledge, is any selection misquoted or misrepresented. Naturally, I have provided the transition, summary, organization, and textual flow required by this form of exposition—in short, the orchestration.

It remains for me to acknowledge explicitly what in any case should be obvious—namely, that this is only one man's view of the matter, in selection and emphasis, in juxtaposition and conclusion. At least, this is how it all sounds to one participant. If what follows is not the debate as it really is, at least it is a perception of the debate that probably prevails in a major sector of the field. And in a major geographic sector too: This formulation of the debate is heavily, unduly, Western in origin—but then so is the debate itself.

In any case, here is an effort to hold the mirror up to nature, with a compressing mechanism: to distill the issues by having the major protagonists have at each other in frank exchange, and thus come closer to saying, in compacted form, what they really think. I trust it has the ring of verisimilitude to informed others, plus utility. For something may be gained by this device, if as intended it captures the essential elements for candid cross-appraisal. That something, in the end, is to clarify and advance the debate.

Finally, I trust that I may be forgiven for borrowing the form of this essay from myself, in "The Great Debate on Cultural Democracy," *Values in America,* Donald N. Barrett, editor (Notre Dame, Indiana: University of Notre Dame Press, 1961), pages 147–168; and that it is understood that to the extent I speak in these pages, I do so for myself, and not for the sponsoring organization.

Introduction

The past decade has been marked by debate on "population policy," within countries and among countries. Like most other debates dealing with public policy on complex social issues, it has been conducted on shifting grounds, under changing rules, by differing participants. Nevertheless, the double core of the debate has always been visible: *whether,* for human welfare now and later, the current rapid rates of population growth need to be slowed down; and if so, *how* that is to be done through deliberate action, mainly by governments.

In 1974, for the first time in man's history, a worldwide conference of governments was held on population policy under United Nations auspices. Far from being settled, the debate was if anything heightened thereby and now continues on a post-Bucharest basis.

This is a contribution to that debate. It is intended to distill the argumentation to essentials, to confront the contending positions directly with one another, to join the issues in a manner not customary in traditional modes. From such a review may come a re-view of where matters really stand.

The growth issue is not the only issue of population policy, but it is the central issue under debate in recent years and the central focus of national and international remedial action. A recent paper exploring the possibility of consensus[1] listed no fewer than 16 policy positions, and even that does not exhaust the distinctions insisted upon by various protagonists.

The debaters are spokesmen for three

Reprinted with permission of The Population Council from an Occasional Paper, 1975. Bernard Berelson (1912–1979) was president of The Population Council from 1968–1974.

prominent viewpoints, clearly identifiable amid the rhetorical mosaic:

FAMPLAN—persuaded of the validity of "the population problem," defined as the need to reduce growth rates and hence fertility rates throughout the world but primarily in the developing countries where they are now particularly high; further persuaded that a useful action to that end is public provision of information and services directed at the voluntary control of fertility among interested couples; typically of a public health or sociological orientation. (It might be fair to add that FamPlan can be seen as representing the Population Establishment in the elementary sense that most of the available resources for population activities are now allocated under this direction, at least in the applied field; thus he could have been called PopEst, but since family programs are near the heart of the policy controversy it seemed better to utilize the more proximate title.)

DEVDEV—primarily interested in "development not population"; varies in his concern over the effect of demographic variables upon development but firmly convinced that the best way to attack population growth, perhaps the only way, is via economic development, social change, social/political revolution, "the new international economic order" . . . ; typically of an economic or political orientation.

ACCRIT—primarily comes to the debate with deep specialized knowledge, theoretical identification, methodological sophistication, and perhaps the ingrained intellectual tendency toward commentary ranging across disciplinary interests but centering on professional demography; plus at some points the voice of another academic commentator, the voice of demographic doom, eco-catastrophe, population bomb, the lifeboat ethic, triage—typically biological and ecological in origin.*

These three seem to represent major foci of views for a productive interchange, and there are three broad topics before the house: population in the context of development, the merit of family planning programs, and the strategies of intervention.

Population in the Context Of Development

DEVDEV—I begin at the foundation: For the poor of the world, development is the thing, not population; population control is no panacea for development; more than that, development and only development will cure the ills of population. ~Lowering the birth rate will not in itself free developing countries from the need to search vigorously for means to achieve agrarian reform, to modernize industry and agricultural production, and to raise the level of education and culture.[2] As the nations of the world in congress assembled said, ~population policies are constituent elements of socioeconomic development policies, never substitutes for them.[3] ~Population policy objectives cannot properly be set in isolation of other social and economic objectives.[4] ~As a matter of fact, Bucharest put population where it belonged—on the back seat of the development bus, and you fellows should feel lucky that you got on the bus at all.[5] ~It has truly been said that the best contraceptive is development.[6] ~Take Care of the People and the Population Will Take Care of Itself.[7]

FAMPLAN—You are making several points at once, and they need separation. First is the point that lowering population growth is no panacea for development. I'm glad you began with that for I couldn't agree with you more. If population growth rates were halved tomorrow in the developing countries, that in itself would not solve the problems of poverty, education and illiteracy, sanitation and disease, food and nutrition, and all the rest. At the same time, it *would* provide a better opportunity for their solution. I have always believed that ~no population policy can be a substitute for economic development. Poverty can only be cured by enhanced production.[8] I thought we had agreed about ending the ~almost meaningless debate in recent years among the advocates of economic development, social change, and family planning. . . . The debate is unnecessary because, if one thing is more obvious than another, it is that all three are required and that no one is a substitute for the other.[9] ~While neither I nor most of my professional colleagues in the population establishment can be considered revolutionaries, it is always a surprise to us to learn that we are proposing population control *instead of* some other ingredients of modernization. We talk more about population than about the balance of trade, income equalization or revamping primary school education, not because we consider these to be of less importance, but because we prefer to talk about those things we know something about. At the very least, this should be judged as merciful.[10] Somehow the attention given population matters in recent years has boomeranged on this point, but those of us working in the field—except perhaps for a few zealots—haven't claimed that we have the magic key to the future, only one important element. It would be good to put that caricature to rest.

ACCRIT—Not so fast, and speak for yourself. ~The explosive growth of the human population is the most significant terrestrial event of the past million millennia. . . . No geological event in a billion years . . . has posed a threat to terrestrial life comparable to that of human overpopulation.[11] ~It is now too late to "solve" the world's population problem. Much that has been destroyed or wasted can never be restored.[12] ~No technical solution can rescue us from the misery of overpopulation. Freedom to breed will bring ruin to all.[13]

FAMPLAN—There speaks the California School of Population Crisis. But that is more an argument between you fellows, between those who think population is Nothing and those who think it is Everything. I am content to think it is a significant Something—as the U.S. Commission said, a serious intensifier and multiplier of a whole range of social problems.

DEVDEV—I'm grateful for FamPlan's discovered moderation, but what I want to stress is that ~decision-making in population must be integrated in the decision-making process of development.[14] ~The message of Bucharest is not that development policy is a substitute for population policy but that the latter is a component of the former,[15] and must be carried on, as the Plan of Action says, within the context of development.

FAMPLAN—I've heard that so often, without specification, that I'm beginning to think it's a slogan. We had thought that population or family planning "going it alone" represents simply a division of labor, an elementary recognition of specialized interests and talents. Yet somehow we are always criticized for not being located ~solidly within the context of general economic and social development. . . .[16] Is the point organizational, programmatic, political, propagandistic, or simply semantic? What exactly does it mean?

DEVDEV—To begin with, it means that population activities should be organized within national and international developmental efforts. Beyond that. . .

FAMPLAN—Excuse me, but they already

*The title does not imply, of course, that there are no critical academics in the other camps, for surely there are. And I appreciate that this title, unlike the others, does not represent a position in the population debate per se. However, in this as in other debates on public policy, the academic critic receives restitutional expression—the commentator on society's actions from outside the pit, the evaluator, the defender of intellectual and moral standards, and so on.

are and always have been. ~Family planning programs are, without exception, part of broader economic development plans.[17] Moreover, the United Nations Fund for Population Activities is the only specialized agency that operates *within* the United Nations Development Programme—not outside as with health or education or industry or employment or environment or food and agriculture. As it happens, population is the only one to be organizationally integrated.

DEVDEV—As I was about to say, beyond that, you should do three things. First, as a tactical improvement over the present situation, you should integrate your family planning efforts into ongoing programs of broader character, as, for example, health, maternal and child care, rural development, community development, agricultural modernization, small industry, and so on.

FAMPLAN—That must really be a question of efficiency. It's not at all clear that putting family planning into other efforts won't raise more problems than it solves, or work worse than the traditional models, especially when you take into account the administrative difficulties of implementing anything as well as the limitations in funding. We may be in for it, post-Bucharest, but if so, that's for political reasons not professional ones.

DEVDEV—As I said, that was only tactical. Second, and the major strategic issue, is to appreciate that development itself will bring about a fertility decline. And Bucharest agreed that basic ~development goals generally have an effect on the socioeconomic context of reproductive decisions that tends to moderate fertility levels,[18] to quote the Plan. Anyway, isn't that what history shows us?—not only in the great fertility gulf between developed and developing countries, as rationalized in the theory of the demographic transition, but before our very eyes in what's happening around the world today when, for example, you compare Taiwan with India. ~There is no need to take steps to affect fertility directly; all our resources should be directed to accelerating development, not preventing births.[19]

ACCRIT—~To take this position is to ignore the fact that the explosively rapid population growth which will occur during the waiting period may well prevent the development of its cure.[20]

FAMPLAN—Anyway, ~to call the promotion of economic and social change a population policy seems like letting the tail wag the dog.[21] ~Perhaps [we] have paid little attention to economic development as a specific population policy on the simple grounds that if development is not undertaken for itself, it will not be undertaken because it should help to reduce birth rates.[22] It is absurd to advocate development as a cure for a high birth rate: Who cares about the birth rate if development is achieved? Then the rationale for fertility intervention diminishes—cart before the horse, defining away the problem. It's a Rube Goldberg solution par excellence.

ACCRIT—Here I must agree. ~That population policy considerations somehow could speed up the overall level of such developmental efforts of governments seems to me an extremely farfetched idea.[23] ~We are likely to be left with the platitudinous proposition that economic and social development will be helpful in solving the population problem—the more development, the better—but the structure of development measures, the real policy issue, remains determined without reference to demographic considerations.[24] ~Must we simply credit development in toto and not seek to analyze and encourage those aspects of the developmental process which are important?[25]

"It is absurd to advocate development as a cure for a high birth rate: Who cares about the birth rate if development is achieved?"

—FamPlan

DEVDEV—But of course that is what I have in mind. The trouble is, FamPlan, that you fellows work on supply without sufficiently considering demand. For that, you must single out those factors in development that are most likely to have an impact on fertility and stress them—what some people call the threshold factors. ~What this actually says is that population policy should attempt to emphasize those aspects of development that have the maximum desirable effect on the achievement of its objectives,[26] those ~development programmes and educational and health strategies which . . . have a decisive impact upon demographic trends, including fertility.[27]

ACCRIT—Before you get very far over the threshold, I have to warn that the more we learn about the historical causes of fertility decline, the less we seem to know. The European transition now appears to be much more complicated, with the so-called threshold factors very blurred if indeed they exist at all. After close examination of such factors as industrialization, urbanization, infant mortality, and literacy, we find ~that there appears to be little in the statistical record for Europe which confirms the existence of an association between the beginning of the fertility decline and any specific level, or threshold, of economic and social development.[28] ~Examples can be found illustrating the presumed influence of [several] factors, but counter-examples or exceptions are nearly as prevalent[29]—the Austrio-Hungarians, the French peasants, the Hutterites, the Soviet republics in Asia. In short, ~research into particular threshold values of social and economic variables which might yield satisfactory predictions of when fertility falls could be expected to occur does not appear to have produced such predictions; rather the reverse—it has suggested such a diverse pattern of demographic transition as to cast significant doubt as to whether it will ever be possible to use historical experience to make such predictions.[30] Not to mention the dangers in equating the twentieth century Third World with the nineteenth century West.

DEVDEV—Academic caution, if not one-upmanship! There are surely a number of aspects of development that can reasonably be expected to have the effect of reducing fertility. We talk about them all the time: popular education,[31] equality for women,[32] income equalization,[33] improvements in employment especially for women,[34] extension of social security and old-age benefits,[35] reduction of infant mortality,[36] encouragement of social mobility,[37] rural modernization and increased agricultural productivity,[38] extension of children's rights and the elimination of child labor,[39] increased incomes and living standards,[40] improved health services,[41] industrialization with special reference to employment of women,[42] reform of land-tenure system,[43] better housing,[44] urbanization,[45] new roads,[46] reform of inheritance laws,[47] and elimination of polygamy[48]—and I may have overlooked a few. In short, those overall social policies that do most to promote social justice.*[49]

FAMPLAN—Well, if AcCrit doesn't know what they are, you certainly do! But what am I supposed to do about that impressive list—which, when you add it up, takes us back to development in toto, or very close to it. If you, DevDev, haven't been able to

*These references should not be considered as exhausting the possible listing.

do "enough" on such factors with all your resources, where does that leave us in the population field? ~To think that manipulation of such variables adds significant new weaponry to population policies is almost certainly an exaggeration, and frequently amounts to, or fosters, wishful thinking.[50] Can nothing be done until these thresholds are reached?—which are pathetically out of reach where needed most. What are the programmatic specifics, not just the theoretical positions? Do you advocate simply incorporating the present allocation of population resources into that broad search?—putting the two percent now supporting population efforts in with the 98 percent devoted to general development, and forgetting about population?

DEVDEV—No, it would probably get lost there and population shouldn't be forgotten. The point is that selected efforts should get greater emphasis, and from far greater resources. Anyway, I don't mean to suggest that everything on this list is of equal importance. Start at the root, with income equalization and poverty reduction. ~In the absence of rural modernization, sustained overall fertility decline in rural areas cannot be anticipated.[51] ~Equality in the distribution of the development process and its benefits[52] is the thing. ~In most poor countries, large-scale fertility declines cannot be expected until the living conditions of the majority of the population improve enough so that they no longer consider large families necessary for *economic* reasons. . . .[53] Stress reduction of poverty rather than reduction of fertility. The former will lead to the latter, as it always has. Thus large social changes appear to be required before FamPlan's effort can be more than trivially effective. And to the extent that population growth holds back those very changes, then we have a chicken-egg problem of great magnitude on which only the edges can be attacked.

ACCRIT—The trouble is that ~the spread of modernization is painfully slow,[54] although at the same time I must acknowledge that, ~in actual fact, many developing countries have undergone enormous, if piecemeal, changes in recent years.[55] But still, a direct demographic attack is needed because—modernization alone . . . has nowhere in the world to date had an abiding and drastically downward effect on family-size desires.[56] ~In any case, there is no ineluctable process at work here, as though a kind of mechanistic determinism will prevail—some peoples are more amenable to change than others, good operators get results where poor ones don't.[57]

FAMPLAN—I agree that things are changing slowly, but they are changing. And that provides my rationale. ~To assert categorically that India or Indonesia or any other country "is not ready" for family planning or a fertility decline seems to assume that these countries are no different than they were 25 or 50 or 100 years ago. . . . But . . . they have changed in many ways.[58] ~It is still plausible to argue that the transformations that have already occurred may be sufficient to support a reasonably successful family planning program, at least in the advanced sectors of most populations.[59] And the only way to find out is to try. As Justice Holmes said, '"The way in which the inevitable comes to pass is through effort." In any case, we do seem to agree ~on two propositions: alleviate the plight of the poor (read: promote social and economic development) and at the same time make available modern means of fertility control . . . (read: provide family planning).[60]

". . . I don't mean to suggest that everything on this list is of equal importance. Start at the root, with income equalization and poverty reduction."

—DevDev

DEVDEV—What we're trying to tell you is that development ~planning should focus on the diffusion of the material conditions of socioeconomic change which accompany the demographic transition.[61] Despite this array, ~this is not the same as to say that development is a substitute for population policy.[62]

ACCRIT—~These policies are socially beneficial as an integral part of modernization and can be so evaluated quite apart from any effects they may have on fertility. On the other hand, although they are statistically correlated with relatively low or declining fertility, the causal relations are not entirely clear. The quantitative magnitude of the impact on fertility and the time required for this impact are uncertain.[63] In any case, ~precisely because of [their] appeal . . . , it can be taken for granted that countries do their best to pursue policies aimed at achieving them regardless of fertility effects. . . . [Moreover,] the existing state of knowledge concerning the determinants of fertility behavior in general seems to dictate strong reservations as to the adequacy of a spontaneous adjustment of fertility in response to the process of economic and social development.[64]

DEVDEV—~This seems to me precisely the opposite of the truth. Most of the things that might help fertility require doing things about poverty, and this is just what governments do *not* do. Family planning can only have a modest impact on poor, illiterate rural populations subject to high mortality, so improve socioeconomic circumstances and, since it doesn't cost much, do whatever you can with family planning at the same time. But surely the point is to avoid pretense that there is any substitute for making poor people richer. When you get right down to it, more governments are pursuing family planning than income re-distribution.[65]

FAMPLAN—So where does that leave us? The fact is, DevDev, that you and your colleagues don't think population pressures are sufficiently serious to warrant any shift in your own development plans. ~It is, in fact, doubtful whether arguments based on fertility effects of development policies are ever strong enough appreciably to modify the mix of development measures that planners would otherwise propose.[66] And despite what you think, AcCrit isn't sure which buttons should be pushed—except that family planning isn't one of them.

ACCRIT—All I can say is that ~the conceptualization of the determinants of fertility requires acceptance of the involvement of a multitude of factors that vary greatly in the intensity and direction of force they exert on fertility.[67] In other words, ~virtually all models of fertility decline involve assertions of multiple causation, that is, the view that several different factors make at least a nontrivial contribution to the process.[68] In short, ~existing theories of fertility decline leave the policymaker vast room for choice. Narrow policy prescriptions do not flow from [the] theory. If we wish to be doctrinaire, there must be some other basis for it.[69]

The Merit of Family Planning Programs

The debaters turn to the major effort now being made to directly affect demographic considerations, namely, family planning programs.

ACCRIT—~Will current programs succeed?[70] The answer is No. ~The world has yet to witness a family planning program which initiated a decline in fertility in a "traditional society" characterized by mass

illiteracy and poverty. The examples of "successful" family planning programs to date . . . are in areas in which fertility declines had already set in before the advent of national family planning policies and programs. . . .[71]

FAMPLAN—To initiate any broad social trend is quite a trick, but we do think we have expedited decline, and consider that a worthwhile accomplishment at the cost. In most settings it has proved impossible to actually carry out the intended program, except on a pilot basis. We probably overestimated the capacity of the administrative system to provide the indicated services, but that would be true of most field efforts, as DevDev surely knows from his own experience. Most programs are still quite weak,[72] so we may not really know—is it lack of interest or lack of program?

DEVDEV—You still won't acknowledge failure, ~that the lowering of population growth rates is [really] dependent on such things as higher living standards, more equal income distribution, higher levels of employment, education, health care—and not by pills and loops alone. . . . ~The results [of your family planning programs] were a dismal and expensive failure.[73]

FAMPLAN—In all fairness to both of us, what you meant to say was ~that population control, measured by the hopes and expectations of the neomalthusians in the mid-sixties . . . is unquestionably a considerable—and costly—failure.[74] I must say, "considerable" is not quite as painful as "dismal," but it still hurts. Maybe in hindsight we were too euphoric a decade ago—perhaps regrettable now but perhaps understandable for the first years of a social movement—and maybe we claimed or expected or simply talked too much.

DEVDEV—There is an important point buried there—namely, that you pushed family planning before the ground was prepared. You would have done better to send economists to planning boards in the 1960s than public health doctors to run programs.

FAMPLAN—You may well be right. And we had that other mistaken perception in the 1960s—an exaggerated idea of the administrative capacities of developing countries. As things turned out, that was a serious error, and one that affected various programs, not just population. All the same, it's always enlightening in such discussions to ask the alternative questions. What if we had not tried hard to spread family planning in the 1960s—when we had new policies, supporting surveys of interest, an improved contraceptive technology, and increasing funds? Could we really have known then that "it wouldn't work"? What would you have said then: that we had missed the boat?

ACCRIT—You've continually been insensitive to any policy alternative to family planning. And you've pushed that unduly, to the point of antagonistic boomerang, as Bucharest documented so well. Worst irony of all—it doesn't work; so you're guilty not only of promising something under false pretenses but diverting attention from other efforts. ~The family planning movement is failing to insure itself against the failure of its present rationale and methods.[75]

FAMPLAN—When you say that current programs cannot succeed, what is your definition of success? What is the goal, or at least the standard of judgment?

ACCRIT—~Zero population growth,[76] of course. ~To achieve fertility and population control adequate to the need, the objective must be that of inducing couples to restrict their childbearing to the replacement level. That is, it is necessary to produce the desired number of children in order to achieve a zero-rate of growth.[77] Current measures do ~not provide population control for any collective purpose, least of all for population stability. . . . About all they could accomplish would be to help countries approaching a modern condition reach *an industrial level* of fertility, a level they would soon reach anyway.[78]

"It's always enlightening in such discussions to ask the alternative questions. What if we had not tried hard to spread family planning in the 1960s . . . ?"

—FamPlan

FAMPLAN—If that is the goal—replacement fertility, or roughly the two-child family by, say, the year 2000—then I agree that "family planning" will probably fail. But that's your goal assigned to me, not mine. ~If the goal is to take one to one-and-a-half points off the growth rate in the developing world in the next 20 years, or, say 15 to 18 points off the birth rate, then . . . we have a differential chance at that. . . . If the goal is to bring about the ultimate fertility decline faster than it would otherwise occur. . . .[79]

ACCRIT—~The important question, however, is not whether the present campaign is somewhat hastening the downward trend in the birthrate but whether, even if it is, it will provide population control for the nation. Actually, the campaign is not designed to provide such control and shows no sign of doing so.[80] And where does that leave you?—you end up offering family planning as a panacea for population growth.

FAMPLAN—That's like the other panacea that DevDev attributed to me, and I don't accept this one either. I know as well as you that a policy of family planning isn't necessarily equivalent to a population policy. You speak of "population control." Well, that depends upon the definition of "control." Can we have a marginal effect, nontrivial?—that's my question. Just as I agree that lowering fertility will make a marginal but important contribution to development, so I think that family planning, if done well, could make a marginal but important contribution to lowering fertility. Is the controversy balanced on an adverb: *only* versus *fully*? A recent study found that in the famous Ceylon case, about 25 percent of the mortality decline could be ascribed to the program of malaria control and the remainder to "development"—nutrition, health services, economic factors.[81] Only 25 percent or fully 25 percent? You don't attack health programs that have made only a marginal contribution, or educational efforts or agricultural modernization. What you usually argue, DevDev, is that since they are only marginal they need more support not less, improvement and expansion of program not contraction. Why does population or family planning turn out to be the special case? ~Would an anti-TB campaign be regarded as a failure if "only" one-third of the decline in TB could be attributed to the campaign efforts? I would judge it a smashing success.[82]

ACCRIT—Just as I thought: ~One can of course defend the programs by saying that the present goals and measures are merely interim ones.[83] ~If it is only a first step, it should be so labeled, and its connection with the next step (and the nature of that next step) should be carefully examined.[84]

FAMPLAN—But, don't you see, I think of family planning as already a next step, after general development and the "threshold" factors, in line with the division of labor we discussed earlier. But I must add that if family planning could bring down the growth rate in the interested developing countries to 1 percent in 20 years or so—which is even more demanding than, for example, the goals recommended by the National Academy of Sciences com-

mittee[85]—I would settle, consider it a great historical achievement, call it "success," and leave the next steps to that next generation—since neither I nor the two of you know what the world's situation would then be, nor could or should we set policy now for then. ~In order to act rationally, you don't need to know the ultimate goal, only the direction in which it is likely to be found.[86] ~Don't forget that in order to get from a growth rate of two-and-one-half percent to zero, you have to go through one.[87]

ACCRIT—Then you admit that you don't have a full solution to the problem of population growth, that you offer a remedy not a cure.[88]

FAMPLAN—I prefer "acknowledge" to "admit," but of course. Do you have one?—not on paper but for the real world?

DEVDEV—At least, then, we can agree on this: that ~family planning programs alone do not appear to be the answer to the population problem in developing societies,[89] ~that family planning alone is not adequate . . . when compared to the magnitude of the problems.[90]

FAMPLAN—That's called the mortal blow of Bucharest, I know. But ~it is a canard that any serious leader in the population or family planning fields has held the view that family planning "alone" will solve the population problem. . . . They have been remarkably candid in acknowledging the limitations of their proposals.[91]

ACCRIT—Not all of them. Listen to this:

> ~Provision of improved means and information for control of fertility to people in developing countries ordinarily exerts a powerful effect upon fertility. . . . There appears to be a substantial basis for optimism that the major part of this work will be accomplished by the end of the current decade. . . . With continued vigorous action by the world community it should be possible to reduce the world crude birthrate to less than 20 and the world population growth rate to less than one percent per annum by the year 1980.[92]

Culminating in this flourish:

> ~As the spring sun erodes and finally breaks the icy grip of winter upon the Northland, so the increasing availability of knowledge and means for control of fertility is removing the mantle of ignorance which has combined with primaeval sexual passion to hold human reproduction at traditionally high levels. . . .[93]

And the claim is still made post-Bucharest: ~Availability of Family Planning Services [is] the Key to Rapid Fertility Reduction.[94] But I know those little "fertility silhouettes," and I've already warned that ~these countries were selected because in general their data are reasonably reliable, which means that on the whole they are more advanced . . . [with] the fastest declines in fertility. . . . This suggests that the declines are being caused by changing social and economic conditions rather than by family planning policy.[95] So you can't expect me to take that kind of thing very seriously.

"What you must guard against is misleading the world by offering a purely technological solution to a basically structural problem."

—DevDev

FAMPLAN—Actually, we may never know how well the purely family planning efforts did, for technical reasons, just as we do not know why the fertility decline in the West occurred when and as it did. You can always say that it would be happening anyway, and neither of us can prove his case beyond legitimate scientific doubt. ~Historians consider change to have been rapid when there was a perceptible difference in the behaviour of successive generations; some of our colleagues are impatient when change from year to year cannot plainly be discerned in the statistics. . . . Some draw the conclusion that little success means that there is little point in continuing to make efforts. The proper conclusion is almost certainly that the effort should increase; especially as success in the field is probably wedge-shaped—in fact ultimate rapid change may depend on a lot of effort now with little or no apparent result at this time.[96]

ACCRIT—But even there you are not faithful to your own creed. In turning away from abortion you have turned away from your own best method. ~Induced abortion . . . has been proved capable of reducing birth rates rapidly . . . yet this method is rejected in nearly all national and international population-control programs.[97]

FAMPLAN—Well, I'm delighted to learn that you believe that family planning can work, if only it would include another method of fertility control. Actually, perhaps the two sharpest fertility changes in recent years were technological in character: the famous decline of fertility in Japan rested on the legalization of abortion[98] and the increase of fertility in Romania on the delegalization of abortion.[99] In any case, I haven't turned away, governments and cultures have—and you can't assign responsibility to me for all their policies. I'm under enough attack from you and DevDev now for 'imposing' my views on them!

DEVDEV—What you must guard against is misleading the world by offering a purely technological solution to a basically structural problem. ~The population problem cannot be solved in a technical way. . . .[100]

FAMPLAN—As the fellow says, all the intellectuals like to put down technology these days, but no one wants to give up his refrigerator—or birth control device, for that matter. Surely abortion as well as contraception is a technological matter, and surely the present methods of fertility control are hardly ideal for illiterate rural populations. And suppose we come up with an immunization against pregnancy—not inconceivable, if you'll pardon the expression—and ask yourself, what realizable social policy would affect fertility as much within a decade? ~The availability of such an inoculation would have more impact on population policy than anything else I have heard discussed. Political leaders are more likely to back programs that can succeed than programs that they believe will fail.[101]

ACCRIT—But there you go again—obsessed with the technology of fertility control. By your own admission, all you could possibly do, if indeed that, is to eliminate unwanted fertility. That strategy is surely based on an article of faith that there really is such a thing, that you have measured it correctly, and that it will disappear if services are offered. ~The assumption . . . is that the population problem is a function of unwanted births and therefore, if women have the means to limit births, the population problem will be solved.[102] The evidence is all to the contrary.

FAMPLAN—It is true that much of the rationale rests on "unwantedness." Those surveys have been and still are social scientific currency in good standing; why are they distinctively misleading here? Moreover, in all fairness, the question is still open as to how much the disparity between response and behavior is because ~we are measuring the demand incorrectly or not meeting it properly or some mixture. We can't just write off the fact that, in

one study after another, sample strata representing millions of people say they are having more children than they want. It isn't enough to assert without proof that these responses are invalid,[103] not to mention the actual demonstration of unwantedness made by the prevalence of illegal and life-risking abortions in much of the world.

DEVDEV—And I must say, AcCrit, that ~as long as the problem of unwanted births remains as large as it is . . . , it seems to constitute the biggest and most incontrovertible population problem.[104]

FAMPLAN—As for cutting into *wanted* fertility, I confess that I don't realistically know how to do that, short of changing life conditions. But I must add that here as elsewhere satisfying the existing market may not be a bad way to extend the market. Anyway, both of you tend to end up your criticisms by saying, "But don't get me wrong, I'm all for family planning."

ACCRIT—But I am. ~There is no reason to abandon family planning programs; contraception is a valuable technological instrument.[105] ~Family planning movements should not be condemned. . . . It makes sense to proceed with programs that appear to be the most direct.[106]

DEVDEV—Me too. ~Family planning is a means to an end and its availability is desirable on many humanitarian, ethical, and utilitarian grounds. These programs provide a necessary service. . . .[107] ~This standpoint does not imply that we are opposed to family planning. On the contrary, we are of the opinion that free access to efficient contraceptives and other means of birth control should be a human right and available to all. . . .[108] ~Family planning . . . can be an effective means of the liberation of the female half of mankind in all societies. . . .[109] Family planning should be recognized ~as an essential means to achieve national goals of the countries wishing to reduce population growth.[110] Family planning can be an effective means to fight against sterility, enhance the quality of health and the socioeconomic conditions of mothers and children, and liberate women. . . . Obviously, family planning can be a useful instrument of modernization.[111] ~This is not at all to deny the importance of continuing to step up both the provision of family planning services in most if not all countries, and research to improve birth control techniques. Nothing . . . should be construed as advocating reduced support for family planning assistance.[112] Finally, ~this is not to cast doubt on the virtue of family planning programmes, which can and do produce worthwhile results. It is only to caution against expecting too much from them.[113]

FAMPLAN—Your last point, DevDev, is a key one: what is to be expected. Population efforts may indeed have failed by your standards, but what does not, in any field involving the behavior of masses of people? You, AcCrit, have been advising all over the place on how to control inflation and eliminate racial discrimination and relieve urban congestion and educate the young and reduce poverty and sustain prosperity and eliminate crime and control drug addiction and bring peace, and how successful have you been? Not to mention, DevDev, the shortfalls in your own Development Decade. And incidentally, if development is supposed to bring down fertility, then it must have failed from this standpoint as well as in its own right; indeed, you can turn the point around—~the relative failure of economic development programs has hampered the attainment of family planning goals.[114] Yet you do not turn away from the renewed effort. On such large matters there are limits to what can be done by direct intervention.

> ***"What's basically needed is the removal of pronatalist pressures, legal and cultural, that have been so imbedded in the human consciousness . . . "***
>
> —AcCrit

DEVDEV—The picture is not quite so dark as AcCrit sometimes makes out. ~Careful attempts to disentangle the impact of these programs from that of changes in socioeconomic conditions in several countries suggest that family planning programs have made a sizable contribution to the observed decline in fertility.[115] ~Much of the disappointment with the achievement of population programs can be traced not to their failure but to the fact that too much has been expected from them. . . . Programs which have succeeded in protecting 15 percent of eligible women . . . are adjudged to have failed. In any other aspect of the struggle to achieve economic and social development, such a percentage would be hailed as an outstanding success.[116] But you do tend to claim too much; you take up too much of the population stage; and your promise has outrun your performance.

FAMPLAN—From the experience to date, about all I would claim is that in the more favored of the developing countries modern family planning, *if done,* can contribute to a decline in the birthrate of about ten points in a decade; and in the less favored, *if done,* to about half that.

DEVDEV—The irony is that ~it is likely that the answers will only come retrospectively when they will be too late to influence either policy or programs.[117]

Strategies of Intervention

The debaters now turn to the strategies beyond family planning and beyond development. What should be done now to hasten a fertility decline?

FAMPLAN—The record will show that we have been searching for additional ways to reduce fertility, beyond family planning,[118] but without much success. We've scrutinized the inventory but have not come up with many actionable ideas. ~The measures which are generally discussed by advocates of "beyond family planning" policies are almost uniformly vague, or are politically or ethically unacceptable, or technically or administratively infeasible.[119]

ACCRIT—The first thing to do is the obvious one. ~Support and encouragement of research on population policy other than family planning is negligible.[120] ~Such programs must be supplemented with equal or greater investments in research and experimentation to determine the required socioeconomic measures.[121] ~The specific measures required for developing [attractive] substitutes [for family interests] are not easy to determine in the absence of research on the question.[122] ~The most immediate barriers to effective programs today are the ignorance of the social sciences . . . and . . . of the biomedical sciences. . . .[123] In short, ~an incremental, piecemeal, or band-aid approach to global problems is no substitute for judicious investigation and systematic analysis.[124]

FAMPLAN—"More research" is of course the last, and first, refuge of the academic, on anything. But you cannot assure us of settled and practicable answers; you do not spell out how the research will feed into the determination of policy; you are reluctant to work on issues defined by the policymaker; and your results, quite properly, are always limited in application and often qualified away, judged from a practical standpoint. I'd be more sympathetic if the studies were tied more closely to the

decisions presented to those who have to act. If I may say so, AcCrit, ~just as a university professor may learn a subject rapidly and efficiently (although at the cost of occasional embarrassment) through being suddenly thrust into teaching a course in it, the need for giving policy advice *now* will reveal the most obvious weaknesses and gaps in knowledge. . . .[125] But I do support AcCrit's call for more research—like family planning, it can't hurt and it might, probably will, help.

ACCRIT—The demographer ~is constantly told, "Tell us what can be done about population," with the implication that if he cannot come up with a satisfactory answer, he is a failure. . . . The demand is for "a solution that will work."[126] ~In calling for approval in advance, the family planning movement confuses the issues. The question of whether a policy, *if adopted,* would succeed is different from the question of whether, *if proposed,* it would be accepted.[127] Anyway I repeat: what the field really needs is more research. Hardly any resources are going into that compared with what FamPlan is getting for programs that are clearly inadequate to the task.

FAMPLAN—I confess that I do tend to consider what is workable, since it's easy to think of policies that would be effective but are impractical. In many situations it is less a question of knowing than of doing: it's the implementation that is lacking, not the knowledge. For example, if India could educate all the children through eight years of school, employ 35–40 percent of the women for money outside the home, lower infant mortality to below 25, raise the per capita income to $800, increase nonagricultural employment by four-fold, and so on—if India could do all that, its birth rate would fall to the low 20s or so.[128] We know what to do, more or less; we just can't do it.

DEVDEV—Another channel is incentives, and not just "bribing" people to practice family planning. ~It is important for every government to carefully examine the total structure of incentives regarding family size which its laws and institutions present to the individual. The object must be to design a broad framework of positive inducements to limit family size, and negative incentives to discourage large families.[129] For example, ~among the devices to be considered . . . are: (1) incentives for deferment of marriage; (2) incentive payments for childless periods . . . ; (3) incentive payments for sterilization; (4) old age pension plans. . . .[130] And one might also mention raising the legal age of marriage, easy divorce, establishment of a youth corps,[131] military and national service, village financing of services,[132] putting ~people back into closed ecological systems . . . where there is little opportunity to escape the ecological consequences of one's own actions,[133] and other community-level programs.[134]

ACCRIT—All of that is fine as far as it goes. What's basically needed is the removal of pronatalist pressures, legal and cultural, that have been so imbedded in the human consciousness across the centuries that we do not even notice they are there. That's where the real compulsion now is—*pro*natalist not anti-. And beyond that is an historical novelty that is now "unacceptable," to some people "unthinkable"—namely, that the state may have to impose involuntary controls on fertility[135] in the public welfare, as it now does on so many other things. ~Coercion is a dirty word to most liberals now, but it need not forever be so. . . . The only kind of coercion I recommend is mutual coercion, mutually agreed upon by the majority of the people affected.[136] The state now says that you can have only one spouse at a time; why can't it tell you that you can have only two children? ~Why not simply limit each couple to two births, with sufficient penalties to discourage three?[137] Alternatively, ~I have suggested, a little tongue in cheek, my "green stamp plan" of marketable licenses for having babies,[138] with transferable coupons which add up to replacement fertility. China, by report, uses community pressure backed by the political apparatus to allocate the children within quotas, and Bangladesh speaks of ~formulat[ing] a set of bold and, if necessary, drastic policies for vigorous action[139] and of ~consider[ing] the imposition of progressively increasing punitive measures against additional children after the second child. . . .[140] There are no two ways about it: population control does not come easy. Even ~in countries where contraception is used, a realistic proposal for a government policy of lowering the birthrate reads like a catalogue of horrors. . . .[141] ~In the famous words of Chairman Mao, adapted rather liberally to this context, a demographic revolution is no picnic.[142]

> *"... the sensitive issues involved in population get tangled up in international politics, as though the substance itself were not problem enough."*
>
> —FamPlan

DEVDEV—In that case, we may not want it. I prefer the disease to the cure, particularly since you haven't proved beyond a reasonable doubt that the blessings of slower growth will be so very large. ~The social consequences of population growth do not seem either so clear-cut or so terrifying to me as to warrant emergency measures.[143] ~Quite apart from the fact that it does not have a shred of political acceptability in the present world, is there a strong enough case to press for a coercive regime of fertility?[144] Why should people let themselves in for your catalogue of horrors and deprive themselves of one of the few values that life holds out for them, all for an uncertain benefit? Would you?

FAMPLAN—I agree. Most of that isn't acceptable, to either the people or the governments.

ACCRIT—Then down with the governments. You mean the likelihood of proposed programs ~to gain acceptance by *existing* governments. . . .[145] "Acceptability" is a trap. ~Virtually all proposed social changes are initially unacceptable, or else they would not need to be proposed. . . . Measures to stop population growth cannot be found which can be guaranteed in advance to be acceptable. They have to win acceptance. . . .[146]

FAMPLAN—~A question of moral (though not intellectual) legitimacy is raised when research leads to the recommendation of actions, the cost of which are [sic] borne entirely by other people. There is something, if not illegitimate, at any rate distasteful in people from safe and comfortable positions recommending revolutions or painful reforms or, for that matter, the maintenance of the *status quo,* to others.[147] You sit in your affluent academic armchairs and admonish others to accept the unacceptable. I seem to recall that a few years ago, when the students were prescribing university reforms and telling you to accept the unacceptable, you climbed the barricades. Now you turn the tables, and when your advice isn't taken, you sit back and say, "Well, I told them; don't blame me if they don't do as I say."

DEVDEV—All of that raises the issue of motives in providing policy prescriptions and/or policy assistance in this field. ~Many of the peoples in many countries see the expression of concern of the rich, white, northern half of the world with population increase as directed towards the not-so-rich, not-so-white, southern half

of the world.... And this can certainly have undertones of racism. The word genocide occasionally is bandied about.[148] To be specific, ~political elites as well as intellectuals in most African countries question the motivations of the highly industrialized nations for actively pushing and financially supporting family planning programs in Africa.[149] ~At present, there is already political reaction against population programs in many countries because they think the advanced nations are trying to sell population control as a cheap means of achieving progress.[150] At the World Population Conference at Bucharest, ~the opponents of the Western approach were clearly in the majority [and intended] without question a repudiation of attempts to make population the culprit for poverty and underdevelopment and a backlash against the way in which imperialist countries have sought to promote birth control in the rest of the world.[151] ~That is why the "demographic approach" to the present problems of the world is so sterile: it points only to a non-solution while, at the same time, with its overdramatization about approaching disaster due to the "population explosion," it distracts the attention of the public from where real solutions may be found.[152]

FAMPLAN—Inevitably, the sensitive issues involved in population get tangled up in international politics, as though the substance itself were not problem enough. Bucharest is the key example. As you have yourself said, DevDev, ~"The deep tensions in the international politico-economic system are aggravated by the world population pressure and at the same time prevent its cure."[153]

DEVDEV—Moreover, your motives are perceived as impure in another way. In our opinion, the primary way of solving the population problem lies in combatting the aggression and plunder of the imperialists, colonialists and neo-colonialists, and particularly the superpowers....[154] ~The most relevant and revealing fact is that a tiny minority in affluent countries is using up food, petrol and other essential commodities out of all proportion to their needs.... The threat to their life styles has led some persons to blame the growth of population in countries like India. But it is the rich who deplete resources and pollute the environment, not the poor.[155] ~It is inadmissible that those who have control of the wealth and resources of mankind should try to resolve the problem of hunger by forbidding the poor to be born.... Is it not a new form of warfare to impose a restrictive demographic policy on nations to ensure that they will not claim their just share of the earth's goods?[156]

FAMPLAN—Inadmissible? Forbid? Impose? Restrict? Such terms fit your vocabulary much better than mine. To the contrary, I'm freeing couples, chiefly women, to make a choice that history has never realistically provided them, partly thanks to you. As for the threat of resource depletion, population growth in developed countries cannot be much of a villain since there's not much of it these days—21 of 31 highly developed countries now have birthrates below replacement[157]—and don't overlook that they are the creator of resources too.

> ***"... in today's world, on an issue that so sharply divides the rich countries from the poor ones, what's really lacking is the political will."***
>
> —AcCrit

DEVDEV—Motives aside, we are dealing with a truly historic affair. ~The solution of the problems addressed... is in my judgment a social revolution.[158] The thrust of the conservative ideology that permeates population thinking is counterrevolutionary.[159] And on the level of politics, ~insisting on population increase as a major cause of underdevelopment can... serve... to distract attention from the real political-economic issues facing the Third World.[160] ~In fact, I've got a feeling that to change the system we're going to have to get a little closer to chaos, by even a greater explosion of population in these countries....[161] ~This is why population policies are opposed by revolutionaries....[162] In any case, population and family planning is seen as a safety valve, a band-aid, a cop-out, that only buttresses the existing system. ~The response of the Population Establishment to this new challenge was to concede the importance of economic and social factors but to carry on as before, arguing that each question should be dealt with separately, with separate strategies and plans for each sector.[163]

FAMPLAN—If the population establishment or what you call its masters wanted to retard the development of the poor countries, wouldn't encouraging their population growth be a cheap way to do so? If we had gone the other way and withheld the modern technology of fertility control, what would we then be accused of? As for the demographic revolution, I am of course enlisted: the question remains, how? With regard to social revolution, that's just another term for development—women's liberation, income equalization, popular education, decent health, and so on. But make no mistake, enabling women to control their own fertility may well count as a revolutionary contribution to their liberation. As for political revolution, that isn't made for demographic reasons, but the demography can help in that it can help to produce light at the end of the tunnel, and that's when revolutionary change occurs.

ACCRIT—But that poses the issue too narrowly. You always try to push the issue back to the provision of contraceptives, FamPlan, as though that has ever been really important. The two of you focus on your own interests, yet even the two together—development and family planning—aren't enough. To date efforts at curtailing population growth in developing countries have been bipolarized into the "economic development" approach on the one hand, and the family planning approach on the other.... Neither approach seems to be practical taken alone, nor do they even appear to be adequate in combination.[164] ~Modernization and birth control alone will clearly not bring family size into line with modern levels of mortality unless this reproductive institution is itself modified....[165]

DEVDEV—And how is that to be done, if not through economic development?

ACCRIT—Through ~a significant lessening of involvement in familial roles..., direct manipulation of family structure itself—planned efforts at deflecting the family's socializing function, reducing the noneconomic utilities of offspring, or introducing nonfamilial distractions and opportunity costs into people's lives.[166] For example, ~offer [Egyptian] women employment as an alternative to childbearing.... [as in] small sewing factories.[167] Or encourage female participation in the Indian labor force[168] or institute ~rigidly compulsory education of children which would remove them as potential economic utilities..., all the while effectively putting intellectual barriers between them and the past generation.[169] ~Many of these policies for influencing the family do not depend on prior economic development, they can be implemented concomitantly with modernization strategies.[170]

DEVDEV—They *are* modernization strategies, to be sure, but let's not fuss over the

semantics. Do you think they can be done outside the development package, any more than fertility control can?

FAMPLAN—~To wonder . . . why the intensification of employment opportunities for women as a means of lowering fertility had not been attempted in India is to wonder as Marie Antoinette did, why the people did not eat cake![171] Nor is it accidental that the sewing factories are not yet running. As for popular education, if all the funds used to support the family planning effort were shifted to education, it would add only a few days to the school year or increase the enrollment by a tiny fraction.[172] The proposals having to do with tax reforms, marriage licenses, maternity leaves, child assistance, public housing, and university fellowships[173] are simply irrelevant in most of the developing world. Such suggestions ~depend on a level of social organization in which the great majority are tax-payers and in employment. If you cannot get blood from a stone, you cannot operate schemes of this kind in the vast populous rural areas of the developing world.[174]

DEVDEV—AcCrit and I are not saying that your effort or your budget can do much to reduce poverty or educate children or employ women but only that such things must happen before you can be even moderately successful.

FAMPLAN—Not so fast—*plus* community pressure plus minimizing insecurity[175] *plus* raised age of marriage *plus* heavy antinatalist propaganda in the name of the revered leader (hardly an unmixed blessing) *plus* a vigorous family planning effort including induced abortion. Anyway, we really don't know yet.

ACCRIT—When you get right down to it, you have to face the fact that in today's world, on an issue that so sharply divides the rich countries from the poor ones, what's really lacking is the political will. And that has to be based on a stronger appreciation of what is involved. ~The effort should be directed toward generating demand for population policies through advancing the analysis of the consequences of population processes.[176] Potentially effective measures ~cannot be proposed seriously until or unless a high level of felt social need for such policies emerges.[177] When natural pressures and contraceptives fail, ~society will have to find other means to solve its demographic problems, relying on disincentives, moral suasion, or command. Such solutions must be national solutions par excellence.[178]

FAMPLAN—Yes, but let the record show that they are still unspecified.

Last Words

The debate seems to keep circling back upon itself. The time has come for summaries and conclusions.

DEVDEV—The basic problem is not population growth but the reduction of poverty, with all that entails both as cause and as consequence. Attacking that basic problem is the best way, in efficiency as well as in morality and politics, to attack the problems of population growth. And the international community must understand this fundamental point and allocate its resources for assistance accordingly. As for "severe" measures to control population, as I said, the cure sounds worse to me than the disease. In any case, don't try to push people around with the threat of "population explosion." Family planning programs are all right, but don't expect them to do very much; anyway they are good for other than demographic reasons and can't do any harm. My last word?—Develop, and in the process, Distribute income more equitably.

"If nothing else, eliminating the straw men from the debate—a sophomore's game—would be a major step forward . . . "

—Berelson

ACCRIT—We simply do not know how to proceed in order to reduce birthrates in traditional societies, which is why I keep calling for more research in order to find out how. Where we do know, we are unwilling to pay the price: People ~do not want runaway population growth . . . but they want to avoid it painlessly.[179] ~In short, they want a miracle.[180] Neither DevDev nor FamPlan has a viable answer: Development takes too long and is itself retarded by the very growth it is meant to relieve; family planning doesn't work, except trivially where it isn't really needed. Some direct demographic measures are required; they aren't altogether clear except that they won't be easy. But the alternatives will be worse. In the longer view, one can only be pessimistic: After all, mankind has never been very good at controlling individual behavior for the common welfare. My last word is double: Research. Restructure.

FAMPLAN—I'm for both development and research, but both will take a long time: that's what makes basic causes and fundamental solutions so basic and fundamental. But that's not the issue, at least for me. The issue is: What if anything should the population effort now do with its small resources, in personnel and funding, that can make the most difference. I'm not sure that I have the proper answer, but I'm convinced that's the proper question. To assign to me poverty reduction or population education or liberation of women or any other alleged threshold of similar magnitude is ludicrous on its face. To call for more study is on the other hand too easy: One tends to remain in a Talmudic tradition where everything is very complicated and nothing can be done. At least I am doing something, however incremental, and if it could be done well it should make a nontrivial difference in softening the growth curve; anyway, it is a useful means to accompany the engine of motivation. Both DevDev and AcCrit are willing that it go on and have not yet told me what else to do that I can do. My last word, then, is: Persevere.

A worthy yet unsatisfying debate, the needle stuck beyond science and within politics: no final guidance from the former, numerous constraints from the latter, and in between lots of room for the play of judgment.

Still, the participants seem to agree on a good deal that they still keep arguing about: the demographic facts, the absence of any panaceas, population as only a means, the need for both direct and indirect efforts, the empirical results of family planning efforts, the useful in both development and family planning, perhaps even the existence of a problem. Why then the continuing acrimony?—semantics, emphasis, point-scoring, putting down the more vulnerable extremes within the opposing camp, ideology. If nothing else, eliminating the straw men from the debate—a sophomore's game—would be a major step forward, though the dynamics of the situation make that unlikely. Given the interests imbedded in the debate, this is understandable, perhaps necessary, probably inevitable—yet at the same time it exacerbates an already difficult situation.

Perhaps the most consequential differences in the debate are not over facts or values but over the formulation of issues. DevDev and AcCrit tend to talk about theoretical analysis and basic causes and fundamental solutions, FamPlan about practical next steps and allocation of resources

and incremental advances. That is where the debate seems to be least joined but most needed, on what the proper policy issues really are. And complicating the resolution is the normal sight-line of the planner and intellectual as against the operator—the long-term versus the short-term.

In reviewing another intellectual debate, the economist Marshall once observed that one was most likely to be right when promoting his own method of inquiry and most likely to be wrong when attacking the other fellow's. In this debate, the reverse seems to be the case: Each debater seems most persuasive when pointing out what's wrong with the others and least persuasive when putting forward his own positive program. Taken together, that adds up to an overwhelming impression of negativism: What can be done is not "enough," what is "enough" cannot be done. As all three of the debaters made clear, proposed actions are often unadoptable for one reason or another, and if adoptable, incapable of being adequately implemented. So as a whole the debate does not lead to an optimistic conclusion, especially when put against the recalcitrance of the problem itself. It is wry comfort, as often observed, ~that the powers of the state to influence fertility or growth, at least to the extent that it has been regarded as practicable to apply them so far, are limited and marginal. . . .[181]

But the modern world does not let great problems rest. ~In earlier times, problems of this character were not so readily identified and, when they were, not so readily addressed. These days the very recognition of a public problem means that something must be done about it.[182] Once recognized, they must be addressed, and readdressed.

The elementary truth is that no path into the future is likely to be painless, not least the path of demographic laissez-faire. ~It is indeed hard not to be philosophical in contemplating the most likely course of demographic-economic development in the coming decades. It holds out the promise of a sustained sense of déjà vu, continuing a developmental line that rapidly increases the gap between what man could be were he able to control his affairs and what he, in fact, is.[183]

Somehow, the debate is not as it ought to be—too often repetitive, circular, untidy, pedestrian, oblique, evasive. ~It is too schematic, it assumes clear-cut and clearly formulated alternatives that do not exist. The point is that nothing works very well, and that goes for development as well as for family planning. Nor is there any substitute for local commitment, resolve, effort—including the subtleties of an international intellectual debate.[184]

Still responsibility rests on these debaters and what they represent. The exchange has a valued life of its own, to generate ideas and/or the consensus to inform and improve action. The population strategy of the 1960s and early 1970s is, though still very much alive, under growing scrutiny; the population strategy from now to 1984 is struggling to be born.

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FamPlan: The Great Debate Abates

"The key is recognizing that it will undoubtedly be development *and* family planning programs that will bring about fertility decline and that a uniform formula will not work across different cultural milieus. . . ."

By Shireen J. Jejeebhoy

The Great Debate on Population Policy has abated considerably since the 1970s. Each extreme has been modified and tempered over the years. Each camp agrees that there are no easy solutions and that population change is only a means, while development or poverty reduction is the end. Each of the three positions treats population growth as an aggravating force contributing to underdevelopment rather than as the major cause of it.[1] Each accepts that population policies form an essential element of social and economic development policies, and that objectives, therefore, cannot be set in isolation and must be implemented within the context of development. All three accept the utility of family planning programs as desirable, and this consensus signals a change in the DevDev position. Finally, strategies for implementation have evolved to reflect the integration of development with family planning programs, as DevDev advocated in the 1970s.

Shift in Emphasis

The single most dramatic change in the decade between the first United Nations Conference on Population, in Bucharest in 1974, and the second, in Mexico in 1984, has been the shift in emphasis from the "Development is the best contraceptive" approach to the acceptance of the importance of family planning programs and related development efforts. While governments were silent or were even opposed to family planning interventions at the first conference, efforts were made to strengthen the commitment to family planning at the second. (The U.S. position, which held population to be neutral, was the one exception.) The 1984 international conference reaffirmed the original World Population Plan of Action and underscored the interrelationship between population and development. But what had changed over the decade was the intensity with which family planning was advocated, especially by the developing world: "What emerges from the Mexico Conference is a clear call to strengthen global efforts in population policies and programs. The high degree of consensus, the recognition of major unanswered needs, and the powerful emphasis on family planning and related health and social programs is both extraordinary and encouraging."[2]

Today, evidence of this commitment to family planning can be seen in the fact that over 90 percent of the developing world lives in countries where family planning is provided either because of demographic or health reasons or as a fundamental human right.[3] As many as 99 out of 131 developing countries provide direct assistance to family planning and 14 provide indirect assistance. And the commitment of the less developed countries to increased program effort between 1972 and 1982 is corroborated by evidence from some 91 countries with comparable data: Forty countries strengthened program effort over the period, another 44 maintained 1972 program effort levels and only seven recorded a weakening in effort.[4]

Development and Population

A less dramatic but nevertheless important change in the 15 years since the Great Population Debate is the increase in empirical research on the questions it raised. In response to AcCrit's plea for additional research, an impressive body of empirical evidence has emerged on such issues as the development versus family planning program argument, estimated levels of contraceptive prevalence and unwanted fertility, identification of socioeconomic factors that are particularly conducive to fertility decline, local-level studies of the determinants of fertility decline and the impact of selected interventions. By and large, these have added substance to the great debate and have forced both DevDev and FamPlan to modify their positions and strategies.

It has been increasingly recognized that expectations raised by traditional demographic transition theory in the West, and its experiences of fertility decline, have little relevance in the context of today's developing countries. DevDev cannot continue to simply say that one must "appreciate that development itself will bring about a fertility decline." In fact, the 1984 World Development Report stressed that population growth has stymied development and that population policies have succeeded in reducing fertility to levels below those normally associated with income levels in many developing countries.[5]

Even "economic modelling strongly suggests that economic gains in developing countries will be associated with development paths characterized by declines in fertility. Lower fertility is advantageous for developing a modernized economy, for providing resources for education, for absorbing labor pressures and for managing urbanization."[6] In other words, FamPlan's argument for the shorter term wisdom of direct steps to reduce population growth has, by and large, been accepted by DevDev.

FamPlan argues that although socioeconomic conditions account for much of the variance in contraceptive prevalence, organized family planning efforts strengthen the association considerably.[7] This contention is supported by systematic research at the macro level on the relative influence of socioeconomic setting and program effort in accounting for fertility declines in developing countries between 1965 and the

Shireen J. Jejeebhoy is a consultant in population and social sciences, Bombay. The author would like to acknowledge Nandita Kapadia-Kondu, Sumati Kulkarni, W. Parker Mauldin, Jyoti Moodbidri and K. Srinivasan for their valuable comments and suggestions.

1980s.[8] The essential underlying argument is that "on balance, family planning programs have a significant, independent effect over and above the effect of socioeconomic factors. . . . The key finding is that the two—social setting and program effort—go together most effectively. The policy implications are that, if a country wants to reduce its fertility, it should seek a high degree of modernization . . . and it should adopt a substantial family planning program. . . . In short, . . . one could conclude that the Bucharest judgment that family planning effort is of little consequence is itself of little consequence."[9]

Accelerating the Pace

Further evidence from 1965 through the 1980s suggests that program effort can and does lead to more rapid fertility decline than would be expected based on socioeconomic indicators alone.[10] Contraceptive prevalence rises in a regular manner as program effort moves from weak to strong. For example, among middle socioeconomic status countries in 1972–1982, prevalence ranged from 11 percent in countries with little program effort to 63 percent among those with strong effort; the corresponding declines in the crude birthrate ranged from three percent to 43 percent. A similar if weaker relationship is observed at other socioeconomic levels. A regression analysis gives relative weights to these effects: The combined direct and indirect (through program effort) effect of socioeconomic setting is certainly strong (0.90) but the direct effect of one aspect of program effort, namely the availability and accessibility of contraceptives, is considerable (0.44)—no mean achievement. The key conclusion obtained in analyses of data from the 1960s, 1970s and 1980s is that *both* socioeconomic status and program effort affect changes in contraceptive prevalence and fertility. And while socioeconomic status is important and explains a substantial part of prevalence, program effort does in fact have an independent, nontrivial effect and essentially serves to strengthen this relationship.

DevDev has argued that in countries where considerable socioeconomic development has occurred, birth control would have become widespread and fertility would have been reduced even in the absence of a program. But we now have studies at both macro and local levels suggesting that even in these situations, the role of family planning programs in accelerating the pace of fertility decline cannot be discounted. The shift to increased contraceptive prevalence has, in fact, occurred more rapidly than anticipated, based on the levels of development in some countries with strong programs, such as Indonesia, Taiwan and Thailand, and in an impoverished area of Bangladesh.[11] In Taiwan, in fact, it has been reported that the program's considerable contribution to the decline in fertility was strongest in the least developed areas of the country.[12]

In any case, the argument in favor of development has been qualified over the years. It is not any development but, rather, development with equality (in which gains are shared by large segments of the population) that contributes to demographic change. This recognition certainly puts some constraints on the forcefulness of the DevDev point of view.

In addition, both positions have had to concede that "cultural differences in social, economic, political and familial organization, as well as in value systems, play an important role in reproductive behavior and change. It is unlikely that simple theories about the role of family planning programs in fertility change will offer explanations valid across broad cultural differences."[13] In other words, different formulas work in different cultural areas, and FamPlan has recognized the need for flexibility and sensitivity to the cultural milieu in the implementation of both development and population measures.

In short, FamPlan's argument can be simply stated as follows: "At the very least, . . . program effort can make a difference in places where conditions are reasonably favorable and sometimes when they are not."[14]

Program Merits and Strategies

Given these findings, whatever the position on the development versus family planning effort argument, no one is about to argue for a zero program effort. But FamPlan has learned over the past 15 years that simply promoting family planning in isolation is not good enough. It is true that changes in contraceptive prevalence and fertility have not been as spectacular as originally anticipated by family planning professionals. Nevertheless, contraceptive prevalence in the less developed world has increased, on average, from less than 10 percent in the 1960s to 45 percent by the 1980s (or 33 percent if China is excluded).[15] Today there are about 400 million couples practicing contraception, and three-fourths of these are in developing countries.[16] Well over 80 percent of these couples are served by their respective national family planning programs.[17]

There is also evidence of a close association between contraceptive prevalence and fertility: Among less developed countries, a 10 percent increase in contraceptive prevalence is associated with a decline in the total fertility rate of 0.7 lifetime births per woman. Further, past program efforts are estimated to have already resulted in 412 million fewer people in the developing world in 1990 than there otherwise might have been, and this impact is expected to increase rapidly in the future.[18]

In 1975, AcCrit argued that family planning programs could at best have an impact on reducing unwanted fertility, but that the overall effect on fertility decline would be negligible. We now have evidence that unwanted births do, in fact, constitute a significant proportion of all births in the less developed world. For example, countries for which expectations of fertility decline are limited, such as Bangladesh and Kenya, have been shown to have unexpectedly high levels of *unwanted* fertility. Furthermore, significant proportions of women in less developed countries now express a desire to delay their next birth.[19]

Even at current family size desires, the impact of longer birth intervals is considerable. There is no doubt that even in the Third World, the demand for children has declined as modern ideas have become increasingly absorbed and alternatives to childbearing have become more apparent. Where desired family size remains unchanged, declines in infant and child mortality and breastfeeding, and the erosion of postpartum abstinence taboos, have inadvertently led to an increase in unwanted fertility, a condition that will clearly respond to family planning programs. Thus, programs can serve "to crystallize and legitimize the latent demand, . . . to hasten the fertility decline and to alleviate the suffering and costs of transition from a traditional to a modern fertility regime, especially among the poor, the uneducated and other disadvantaged strata."[20]

Nonusers of contraceptives who want no more children, and pregnant and amenorrheic women whose current or most recent pregnancy was unintended, can be defined as having an unmet contraceptive need. Demographic and Health Survey data from 11 countries at varying stages of fertility transition indicate that there are relatively high levels of unmet need at each of the transition stages: The proportions of currently married women aged 15–40 who have an unmet need for contraception are 15–20 percent in the low fertility countries, 25–35 percent in the moderate fertility

countries and an unexpected 22–33 percent in the high fertility countries.[21] Similarly, it has been estimated that as much as 21 percent of current fertility in the Third World is unwanted.

Estimates of the potential demographic impact of satisfying unmet need suggest that reductions in marital fertility of 3–30 percent can be expected, with no further reduction in wanted fertility.[22] And if from 1990 onwards all unwanted births were to vanish, the size of the developing world population would reach 7.3 billion by 2050—that is, about 1.5 billion less than the standard projections predict.[23]

Obstacles to Contraceptive Use

On the household level, too, once the potential number of children a couple can have exceeds the desire for children, there is a latent demand for family planning. Whether or not contraception is practiced depends on the costs associated with it—in time, money, quality of services and other attitudinal obstacles.[24] From the above discussion on unwanted fertility, we can infer that for a large number of couples in the developing world today, the potential number of surviving children exceeds the desired number, and so the role of family planning effort becomes critical. Therefore, FamPlan has stressed the reduction of obstacles to contraceptive practice through better accessibility and quality of care, the development and use of new technologies, and so on. There is evidence that new and improved birth control technologies have contributed to the spread of contraceptive prevalence.[25] Data from 72 developing countries suggest that the availability and choice of contraceptive methods is critical in the pace at which prevalence increases.[26] After the effect of socioeconomic development is controlled for, the addition of one more method is associated with an increase of about six percent in contraceptive use, which translates into a reduction in the crude birthrate of 2.6 live births per 1,000 population.[27]

There is evidence to support FamPlan's contention that efficient and well-managed family planning programs can result in major fertility declines in underdeveloped societies with poor and illiterate populations. For example, Indonesia's fertility decline occurred under unfavorable socioeconomic conditions and is attributed to its distinctive program strategy and aggressive implementation.[28] The Family Planning–Health Services Project in Matlab, Bangladesh has had even more impressive results: In less than a decade, contraceptive prevalence rose from seven percent to over 40 percent, and fertility rates fell by 22–25 percent. The project combines an integrated approach with culturally acceptable and high quality measures, including a well-trained staff, a cafeteria of methods and a stress on quality of care and follow-up. In the Matlab experiment, demand "represented a necessary but not sufficient condition for fertility decline, since rigorous contraceptive service delivery was the critical catalyst of the Matlab fertility transition."[29] This approach, suitably modified, is being applied on a wider scale in Bangladesh.

FamPlan has accepted the wisdom of DevDev's criticism that population activities cannot simply supply services without paying some attention to generating demand for those services, and that population activities cannot be advanced in isolation of other major related development efforts. Family planning intervention strategies have undergone a significant change regarding their integration with other development programs and the increased emphasis on generating direct demand.

Family planning programs have become widely linked with maternal and child health care activities. The consensus regarding birth spacing as desirable for the health and welfare of mothers and children has provided an important rationale for linking family planning programs to health initiatives.[30] International conferences on safe motherhood and on better health for women and children through family planning have highlighted the linkages with family planning policies and programs, appealing for stronger measures to integrate the two and to reorient priorities so that family planning is a key element in the design and implementation of primary health programs.[31]

More generally, it has been recognized that family planning efforts should be integrated with broader development programs such as, to name a few, improvement of women's status, skill and income opportunities; agricultural development; education; community participation; and so on.[32] Unfortunately, there are few studies of the extent to which this integration has actually taken place and even fewer on the impact of those coordinated efforts that are already in place.

At the same time, more attention has been paid to direct efforts to generate demand through more innovative and intensive programs in information, education and motivation. While family planning programs are increasingly engaged in spreading the idea of small family size, the extent to which these efforts have been successful needs further investigation.

Finally, speaking of linkages, there is a need for some between DevDev, AcCrit and FamPlan. Research findings have to be disseminated beyond the academic community and among FamPlan and DevDev specialists alike. These findings and program implications must be expressed clearly and succinctly. There is certainly a need for research, but it must respond both to the needs of the family planning programs and to related development programs. Findings must then be incorporated back into these programs.

Last Words

There is strong evidence, except in countries with the lowest levels of socioeconomic development, that developing countries are likely to achieve both significant increases in contraceptive prevalence and declines in fertility through substantial family planning programs, which are undeniably a necessary element of development programs today. The socioeconomic development *versus* family planning debate is dated from today's perspective. The key is recognizing that it will undoubtedly be development *and* family planning programs that will bring about fertility declines and that a uniform formula will not work across different cultural milieus—innovation and modification across countries and regions must be pursued on a continuing basis.

The years since The Great Population Debate have tempered each extreme position, and the current more moderate "wisdom" can be summarized as follows:

- It is accepted that slower population growth would be beneficial to the economic development of most developing countries.
- The role of DevDev in creating the demand for family planning is undisputed. Both on the macro and household levels, FamPlan concedes that development sets the ball rolling in terms of motivation or setting. But it is also accepted that program effort accelerates the pace of increase in contraceptive prevalence, both in settings where conditions are reasonably favorable and, sometimes, where they are not.
- At the field level, FamPlan has accepted a broader perspective. Family planning is no longer offered in a vacuum but is integrated with other developmental activities, such as child survival in particular, and with women's concerns and development in general.
- The suspicion that the effect of organ-

ized family planning programs has been marginal has been countered by empirical evidence that has clearly demonstrated the impact of family planning programs on contraceptive prevalence, fertility and population size in developing countries, as well as FamPlan's key role in fulfilling the substantial unmet need in the Third World today.

• Finally, each position acknowledges that different formulas work in different cultural contexts and that the relative importance of development and family planning programs vary correspondingly.

When the next UN conference is held, the population of the world will be a staggering 5.7 billion. And while the population growth rate will have begun to slow down, disparities in the quality of life of these 5.7 billion people will show little trend toward narrowing. Hence, a concern for "quality" will become as important an issue in 1994 as numbers and the growth rate have been thus far. And notable among these concerns will be the issue of investing in women's health, education and access to services. A second area that has been receiving considerable interest, and that will definitely be grappled with, is the quality of the environment and its population implications. Finally, the focus will be on the quality of the programs themselves—of health and family welfare services, of overall care, of outreach services—and on satisfying the substantial and growing unmet need for family planning services.

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DevDev: A Balanced, Moderate And Eclectic Perspective

"Compared to the great debate of the 1970s, the later accumulation of empirical studies was sufficient to defuse the fervor of the debate by painting a much less alarmist picture of the consequences of population growth."

by Allen C. Kelley

Often in great debates the central issues are not resolved, but their intensity fades as extremism gives way to broadened analytical perspectives, and accumulated empirical evidence gives argumentation a stronger foothold. Bernard Berelson's classic 1975 rendering of the debate on the determinants and consequences of rapid population change is illustrative of this phenomenon. Over time, while the underlying issues have remained the same, the "acrimony, semantics, emphasis, point-scoring, putting down of the more vulnerable extremes within the opposing camp"[1] have given way to accommodation between the more reasonable participants in the debate, the DevDevs and the FamPlans. (Lamentably, the AcCrits, a diverse group of a somewhat dogmatic persuasion, remain remarkably resilient to advances in analysis and the gathering of evidence. As a result, their influence has waned.)

What has caused this moderation of opinion concerning the "great debate" on population policy? Two factors are primarily responsible. First, the perceived urgency of the so-called population problem has diminished as most Third World nations (except those in Africa) have made the breakthrough to declining fertility rates. The specters of below-replacement fertility and aging populations in the developed world are beginning to rival concerns about high population growth in the Third World.

Second, a vast literature amassed over the last 15 years has provided a substantially revised assessment of both the empirical consequences and the analytical determinants of population growth. This literature now supports a balanced, moderate, and somewhat eclectic perspective, one that is in stark contrast to the alarmist view of the consequences of population growth at the time of Berelson's writing. (For example, Robert S. McNamara likened the impacts of population growth to the perils of nuclear war.[2]) DevDev's forceful argument that many problems attributed to population growth are in fact caused by other factors (although exacerbated by population numbers) has been sustained by a large empirical literature.

Moreover, the analytical literature now favors a synthesis of factors explaining fertility decline using a framework that comfortably encompasses both DevDev and FamPlan. As a result, most participants in the debate now perceive population growth's adverse effects as considerably less threatening than they did in the 1970s. Indeed, a revisionist view of the impacts of population growth is now widely embraced.[3] Berelson had remarked that "eliminating the straw men from the debate—a sophomore's game—would be a major step forward."[4] This has largely come to pass.

Reassessing Empirical Consequences

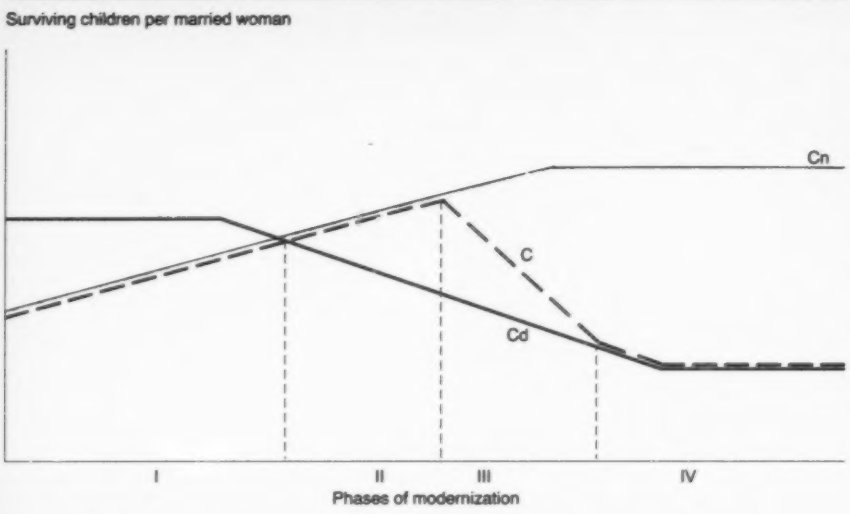
During the 1970s, the debate on the consequences of population growth was widely considered to be closed. Rapid growth rates were considered by most to be a strong deterrent to economic development in the Third World. Rather suddenly, this debate was reopened in the 1980s, culminating in a near reversal of U.S. population policy at the UN's International Conference on Population in Mexico City in 1984. According to Timothy King, senior economist at the World Bank, there were two reasons for this reversal.[5] First, there was a tendency to exaggerate population's significance. The antinatalist case was overstated and a backlash was inevitable. Second, some of the most important arguments and evidence that formed the basis of the antinatalist positions required qualification by further research.

Much of the necessary research was summarized in a National Academy of Sciences report issued in 1986.[6] Written by some of the most prominent economic demographers in the world, including a past president and the president-elect of the Population Association of America, this report provided a relatively moderate, nonalarmist picture of the links between population and development in the Third World. It espoused what can be called a revisionist interpretation, arguing that the negative impacts of population growth are not nearly as great as the alarmists claimed; that population growth is not the primary cause of major constraints on Third World development; that some of the previous antinatalist arguments were not empirically sound; and that analyses of the economic impacts of rapid population growth should not ignore indirect impacts such as the adoption of new technologies.

The report qualified several previously-held concerns about the consequences of population growth. For example, it concluded that worries about population growth causing resource exhaustion are probably misplaced: The relationship between population and global resource use is not all that strong. The report also concluded that pollution problems are solved largely by government policies correcting market weakness and are not specifically caused by population growth, although slower growth gives governments more time to react. Another finding was that the traditional concern about a substantial reduction of saving due to rapid population growth did not appear to be sustained in the data. In addition, the report suggested that problems associated with city growth are to be solved primarily by modifying government policies that encourage people to live in or move to cities; reduction of population growth is not necessarily a primary means of solving locational imbalances.

Allen C. Kelley is James B. Duke professor of economics and associate director of the Center for Demographic Studies at Duke University.

Figure 1. Easterlin's synthesis model of fertility determination



Source: See reference 10.

Some antinatalist concerns were sustained in the report, which noted, for example, that the impact of population growth on the degradation of renewable resources is a serious problem where property rights are difficult to assign or maintain, such as in rain forests and fishing areas. The report also stated that large families result in households spending less on the health, nutrition and education of individual children. (It was referring mainly to the qualitative impact on children, as the quantitative impact of expenditure allocation is difficult to assess.)

The overall tone of the report was centrist-to-mildly pessimistic, and certainly nonalarmist—a major turnabout in the literature, as well as the debate: "*On balance*, we reach the *qualitative* conclusion that *slower* population growth would be beneficial to the economic development of *most* developing countries."[7] (Emphases added.) The report writers clearly agonized over this statement; its moderate, eclectic orientation is illustrated by the highlighted words. "On balance" refers to the conclusion that there are several positive effects of population growth on development. "Slower" instead of "slow" indicates that the report writers were unwilling to make quantitative statements—only that slower is better than faster. They do not allude to zero population growth, and their conclusion is consistent with an optimum population growth rate of two percent, one percent, zero percent or minus two percent. "Most" recognizes that population growth may actually enhance development in some countries.

This revisionist position is broadly supported by other literature reviews of the 1980s[8] and contrasts sharply with the National Academy Study of 1971,[9] which found virtually no good in increased population numbers and identified about 16 reasons why smaller populations would benefit mankind. Compared to the great debate of the 1970s, the later accumulation of empirical studies was sufficient to defuse the fervor of the debate by painting a much less alarmist picture of the consequences of population growth.

Reassessing Analytical Determinants

The debate of the 1970s centered primarily on the various determinants of population growth. FamPlans emphasized the importance of providing family planning information and introducing new technologies; DevDevs believed that the demand for such family planning was determined, in large part, by factors related to economic development. Within the FamPlan camp, there was division over whether family planning should be combined operationally with, or apart from, the provision of services relating to child and maternal health. Again, as with the consequences-of-population debate, a more flexible outlook has emerged over time, and the gathering of empirical evidence has yielded moderate positions.

The broadened perspective is best characterized by Richard Easterlin's "synthesis" model[10] of fertility determination—a framework that presently dominates the literature, and one that comfortably embraces the positions of both DevDev and FamPlan. The model directly addresses a central issue in the debate: whether the emphasis of population policy should be on the supplying of family planning services or on the creation of the demand for such services through socioeconomic programming and efforts such as information, education, and communication. It also incorporates both biological and behavioral determinants of fertility and mortality.

As depicted in Figure 1, three major factors determine the number of surviving children per married woman. The first is natural fertility less child deaths (Cn)—the number of surviving children the woman would bear in the absence of any conscious use of modern or traditional means of controlling family size. Natural fertility rises over time as a result of improved health and economic conditions as well as changes in breastfeeding practices.

The second factor is parents' desire for children (Cd). This depends primarily on the psychological, social and monetary benefits and costs of having children. As the relative benefits versus costs decline, so too does the desired number of children. The action needed to attain ideal family size is the third factor. It involves deliberate decision-making and the adoption of family planning behavior, which has psychological, social and monetary costs. Until these costs are low, parents will not achieve their ideal family size (in Figure 1, the desired fertility line to the right of the intersection with the natural fertility line); rather, they will have families exceeding this norm (the broken line). In this model, a major effect of family planning is to reduce the costs of fertility control and to close the gap between the number of children desired and the regime of natural fertility.

There are several phases toward modernization in the model. In phase I, the desired number of children (Cd) exceeds the optimum number of children under a natural fertility regime (Cn). Population growth is constrained by natural fertility and infant and child mortality, and the number of surviving children (C) equals Cn. In phase II, the supply constraint is released (Cn exceeds Cd), but contraceptive practice is too costly (it may be unavailable, monetarily too expensive, psychologically or physiologically undesired, or religiously or culturally taboo); C therefore remains at Cn. In phase III, contraceptive practice becomes increasingly pervasive as the gap between Cn and Cd widens and contraceptive costs decline.

Several features of this model that bear on the "great debate" merit highlighting.

First, the decline in the demand for children represents the fundamentally determining force in the demand for family planning. Population programs focusing on the provision of low-cost methods of contraception are effectively constrained by family-size norms. Second, a major determinant of the demand for family planning is child mortality; family planning programs combined with maternal and child health programs are therefore appropriate in some instances. Third, in some countries or regions (those in phase I), family planning programs lowering the costs of contraceptive practice will be ineffective. Fourth, the nature of family planning programs can and should vary according to the phase of development and the various "costs" of family planning in the area served. Finally, family planning is best seen not as a motivational—and therefore fundamental—determinant of fertility, but as an important facilitating factor for closing the gap between actual and desired family size.

In this framework, the either-or perspective of family planning versus development as the best contraceptive is clearly inappropriate. Instead, the policy choice should be one of relative emphasis, and this will vary from setting to setting. With these broadened analytical perspectives in mind, some of the confrontational dimensions of the great debate of the 1970s have largely vanished. Indeed, most analysts of alternative population policy strategies now agree that socioeconomic development and family planning should supplement rather than supplant each other.

Moreover, many countries and regions have modernized since the 1970s (shown in the horizontal axis in Figure 1). This has resulted, predictably, in a substantial increase in the demand for family planning. It is no longer necessary to wait for development to create a demand for family planning—certainly a bone of contention in the great debate—as the demand now exists without question. The previous energy family planning activists devoted to merely advancing their cause is now being replaced by the challenge of developing effective programs to meet the demand, a formidable task in many Third World countries.

Who Won the Debate?

Having argued that the intensity and extremist nature of the great population debate has now subsided, it may be interesting to ask: Who won? There are several different ways of viewing the outcome. On intellectual grounds, the nod clearly goes to DevDev. Development—not family planning activities—has largely resulted in the increased demand for contraceptive methods; without development the impact of family planning programs would have been limited.[11] Moreover, much of fertility reduction has been the result of the knowledge and use of traditional methods, with or without family planning programs. On operational grounds, the FamPlans have come into their own—in part because many have embraced (with some qualification, of course) the broadened perspectives of the revisionist philosophy and the synthesis model, and in part because the fundamental nature of population dynamics makes family planning programs particularly cost-effective.

Population policy in the Third World is most likely to work best where the DevDevs and FamPlans both adopt the revisionist and the synthesis perspectives, since this helps avoid unproductive issues of contention (the debating "strawmen," in Berelson's assessment) and creates an increasingly recognized and accepted common ground for collaboration. Among the enlightened participants on both sides of the old population debate there is now "constructive tension"—a useful synthesis and accommodation of what were once confrontational views, resulting in a productive, symbiotic working relationship. This outcome is particularly satisfying because it is based on a better scientific understanding of the determinants and consequences of population change.

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AcCrit: An Argument Yet to Have Its Day

"How then might an updated AcCrit view the present state of affairs? He or she would . . . [argue that] as providers of family planning services, programs have been fairly marginal to the world's demographic course over the past four decades."

By Geoffrey McNicoll

In the generally turgid social science literature, Bernard Berelson's writings stood out for their plain speaking—here, the reader felt, was manifest common sense. The subject of population policy was merely the latest of a number of fields that experienced his treatment. The skills of the communicator, however, are at the service of his message, and the Socratic format of Berelson's "The Great Debate on Population Policy" does not just put a variety of arguments on the table: It communicates, albeit as subtext, Berelson's message.

The message, to my reading, goes something like this: There are all sorts of things wrong with family planning programs, but they are the best means we have to cope with too-rapid population growth; they are transparent and direct; if they don't work as well as they are made out to, they are at least moderately effective in most settings and cheap in comparison to the kinds of changes that bring fertility down in the natural course of economic development (changes that would go ahead anyway); and the alternative policies implied in more general criticisms of such programs (if any alternatives can be found) tend to be politically unfeasible, if not socially obnoxious.

There is much to be said in favor of such a stance; many informed and thoughtful people adopt it. But it would be surprising if its acceptance left room for a balanced treatment of other positions. Berelson, true to Socrates, has stacked the deck.

FamPlan is thus the lead character in "The Great Debate." The principal supporting role is that of DevDev, and the dialogue between these two protagonists is the main engagement. The brief I hold in these comments, however, is for the third protagonist, AcCrit, Berelson's embodiment of academic criticism. Compared with the others, AcCrit is given short shrift. The character is cobbled together from several positions that are juxtaposed somewhat arbitrarily. Before considering the course of events and policy thinking over the period since the piece was published, I shall remark briefly on these constituent strands.

The chief component of AcCrit's views is the position set out in Kingsley Davis's well-known *Science* article of 1967:[1] To the social scientist steeped in Max Weber, Emile Durkheim, Talcott Parsons and other theorists of social organization and change, major behavioral shifts such as couples' deciding to have two or three children rather than five or six (or as many as come) are not to be attained by billboards and mobile clinics. Fertility is altogether more serious: It is, in a nontrivial sense, what society is all about. Radical fertility decline, where it occurs voluntarily, can be traced to the economic and cultural transformation wrought, in varying degrees, by education, modern technology and exposure to the industrial world—its patterns of living and, in particular, of consumption.

If policy is to compete in this league, it must concern itself with deep issues of economic and social organization (cost structures, family forms and gender roles, social stratification and mobility) and—an even taller order—with cultural systems. Family planning programs are the merest tinkering at the edges, medicalizing an intrinsically nonmedical issue and imputing a behavioral helplessness (if not obtuseness) to developing world populations that apparently had never marked those of Europe, North America or Japan at the time of their fertility transitions.

A second component in Berelson's AcCrit represents in some respects a parallel critique cast in terms of rational choice, bringing the conceptual apparatus of institutional economics and public choice theory to bear on demographic change and population policy. At the national level, the population problem is a divergence between aggregated individual fertility interests and the social interest (suitably defined) in the country's population size and growth rate. Solutions involve harmonizing the two—for example, by measures directed at raising the costs of and lessening the economic returns from children to their parents, or by institutional changes that expose individuals more directly to the social costs of their demographic behavior. Individual self-interest is assumed to be the primary human motivation, but it operates in complex ways through inherited institutional and cultural forms. Tracing these structures of interest helps in understanding existing fertility regimes and their possibilities for being modified through public policy. Family planning programs, rarely informed by any such understanding, are implausible candidates for initiating demographic change. Where programs have apparently been most successful, it is likely that they have been catering to a demand for services that was expanding mostly for other reasons. Paul Demeny has been a prominent exponent of many of these arguments: They were the subject of numerous internal exchanges with Berelson at The Population Council. But "The Great Debate" does not, on the whole, do them justice.

A third, essentially unrelated, component of AcCrit is the viewpoint of the modern Malthusian, obsessed with the finitude of the world and the limits to growth. Human population increase in recent decades (and as it is projected to continue) is a global disaster in the making: Natural resources will run out, ecological systems will be irreversibly degraded, and, in the Club of Rome's vision, populations will collapse.[2] Garrett Hardin has been a seminal figure here, willing to

Geoffrey McNicoll is professorial fellow at the Research School of Social Sciences, Australian National University, Canberra.

countenance (and even advocate) coercive measures, though consensually arrived at, to restrain the increase in human numbers—in humanity's own interests as well as for the stability of the global ecosystem.[3] There is perhaps an echo of Hardin-style triage in Berelson's well-known categorization of countries into groups that will, maybe will, probably won't and can't possibly achieve low fertility by a given time.[4]

AcCrit thus has multiple personalities that, combined with a tendency to Olympian reprimand ("[commenting] on society's actions from outside the pit") and an alleged inability to specify remedial action in politically feasible terms and budgetable packages, have left him (or her) on the sidelines of Berelson's debate, carping from the bleachers or fulminating in the wilderness while those who *do* claim to have ready solutions get on with the real argument.

Leaving aside all that could be said about this characterization, what has changed to alter the terms of the debate in the 15 years since Berelson's essay was first published? Demographically, much has happened, although mostly along the lines anticipated. Over one billion people have been added to the planet, bringing the world's population to 5.3 billion by 1990. The next few billions are expected at less than 12-year intervals, with the world reaching eight billion by 2020. These massive figures notwithstanding, fertility in the developing world has turned downward decisively. The total fertility rate, which was six children per woman around 1960, had fallen to about five per woman when Berelson wrote "The Great Debate" and to about four per woman in the mid-1980s. According to the 1988 United Nations medium-variant projection, it is heading to 2.3 children per woman by 2025. Only some observers caution that there is nothing automatic about that projection line: Demographers have had a mixed record in forecasting and not a few spectacular failures (hence their clinging to the term "projection" until events bear them out).

Under these circumstances, the debate on population policy, in the terms under which Berelson conducted it, has lost much of its heat. Yet little seems to have been resolved.

In practical terms, family planning programs are decidedly victorious, enjoying the lion's share of resources—even of research funds, spent largely on refining the details of program operation[5]—and dominating the population policy niche in both national governments and international agencies. Berelson was writing at the time of the 1974 Bucharest conference, the occasion of John D. Rockefeller 3rd's notable recantation of faith in family planning programs and espousal of development as population policy.[6] As it turned out, the Bucharest rhetoric remained just that. India and China proceeded on their respective policy paths, ignoring their statements at the conference. U.S. support for international family planning activities also continued unabated until it was caught up in domestic abortion politics in the 1980s; at that point, the United States government cut funding for the United Nations Fund for Population Activities and the International Planned Parenthood Federation, but not its bilateral support of developing-world family planning programs.

Yet this dominance on the ground has not followed from an intellectual victory. The empirical situation remains messy. The World Fertility Survey produced a mass of data on fertility and contraceptive use but disappointingly little on fertility determinants in the sense in which most social scientists would understand them. (Important theorizing on the demographic implications of what Norman Ryder calls "implicit contractual relationships between the generations and genders" has been based on entirely separate fieldwork.[7]) Studies that purport to show the antinatalist effect of family planning programs have been legion—a 1985 bibliography listed 360 items[8]—but have not convinced the skeptical reader that those effects are very great. Some of these studies simply reestablish by regression analysis the undeniable relationship between the practice of contraception and fertility outcome and assume that something is thereby being said about *program* effects.* In many other studies, the model specification rules out in advance the likelihood that measured "program effort" is in considerable part a reflection of demand conditions, thus fundamentally begging the question that is being asked.[9] Actual social experiments of the sort exemplified by those undertaken in Matlab (Bangladesh) or earlier in Taichung (Taiwan), and intensive, grass-roots fieldwork like that undertaken by the Caldwells in South India,[10] have been conspicuously rare.

The dominance in population policy of the family planning program has been aided by academic economists' virtual disengagement from an interest in this policy domain, particularly in the United States. Taking seriously the adjustment and substitutability assumptions of their theory, economists in the discipline's mainstream neoclassical tradition belatedly disputed the view that population ever *did* pose a serious problem: Renewable resources needed watching, but by and large a laissez-faire stance on fertility was the best.[11] Talk of policy measures "beyond family planning" (in Berelson's time, the economists' bailiwick in population policy) was largely abandoned.

Surprisingly, moreover, there was no resulting pressure to dismantle or privatize family planning programs in line with the burgeoning general criticism of government roles and the "nanny state." Perhaps the budget-makers in governments and in the international agencies found the revisionist case unpersuasive, or perhaps family planning programs were protected by their remaining, uncontested rationale—the health and welfare benefits they offer, especially to women. In any event, program budgets have flourished thus far, and the public sector has preserved a major and intrusive role in this quintessentially private domain of behavior.

With economists in retreat, other scholars moved in to reassess the process of fertility transition. Some now see it as governed primarily by "ideational" rather than "structural" factors, an interpretation that, it is argued, is supported by World Fertility Survey results.[12] Again, there is a benefit to family planners: Aspirations and attitudes relevant to birth control and family formation might be deemed to lie appreciably within the province of family planning programs, while socioeconomic conditions and opportunities would be largely beyond program reach. Yet the dichotomy is dubious. The ideas that "proximately" govern fertility behavior are not free-floating; in part they reflect general cultural orientations (for instance, the degree of secularism or of individuals' sense of their autonomy and scope of action) and in part they express the hopes, fears and expectations elicited by those conditions and opportunities. The leverage of programs is not apparent in either case. Giving more weight to cultural transformation in bringing about fertility transition can usefully correct overly materialistic interpretations; allowing selective cultural change at will implausibly trivializes the transition.

For the media, and for many demogra-

*Program interests have greatly benefited from the sloppy English usage that conflates "family planning programs"—the organizational entities that deliver promotional messages and contraceptive supplies and services—with family planning—what couples do to govern fertility.

phers, the fertility downturn in the developing world has meant that the drama of population growth has passed. It is assumed that population policy has done what it could in most high-fertility regions and that fertility transition is in progress. Even in Africa, the laggard region, United Nations and World Bank projections anticipate a decline starting in the 1990s. A complaisant approach to policy seems justified, and is encouraged by the revisionist economic thinking already noted.

For ecologists, in contrast, the population drama has just begun. Whatever effects sheer numbers of people have had on the global ecosystem over the past millennia will be dwarfed by the effects brought about by the next—final?—doubling of population size that is in store. As with a supertanker nearing a reef, the course of population growth may have been changed but the response is agonizingly slow—and it is the pace and direction of movement, not the position of the rudder, that determines whether the ship founders.

As consciousness of the human impact on the environment and knowledge about the dynamics of the ecosystem grow, efforts to counter the ill effects garner more support. The emergence of politically powerful green movements in the industrialized world and their beginnings in many developing countries[13] over the last 15 years are vital changes. Early pamphlets from Zero Population Growth and studies by the Club of Rome that predicted imminent resource exhaustion could be dismissed by ridicule, often deservedly.[14] The current depictions—not of population collapse but of environmental degradation and welfare losses, both material and aesthetic—cannot be. Influential institutions such as the World Bank and *The Economist* now take the matter seriously.

Of course, interactions between population and the environment are not givens, but are mediated by technological and institutional factors within human control. Rapid population growth, however, makes exercise of that control exceedingly difficult.[15] Changes forecast in climatic patterns and sea levels over the next few decades would pose serious adjustment problems, even if they were not going to coincide with the problems of making room for and equipping an additional several billion people.

How then might an updated AcCrit view the present state of affairs? He or she would heavily discount most claims of family planning program accomplishment. Indeed, AcCrit would suspect that in their capacity as providers of family planning services, programs have been fairly marginal to the world's demographic course over the past four decades: With the simple removal of prohibitions and the provision of information, contraceptive demand would have emerged at much the same pace as that needed for most of the fertility changes actually observed, but governments needlessly preempted supply responses through the market. (China, of course, has been a case of induced fertility decline of spectacular proportions, but claiming success for family planning *qua program* in China, as is sometimes done, is absurd. The manipulation of the political and economic costs of children to parents that underlay the halving of China's fertility during the 1970s[16] was clearly, in Berelsonian terms, "beyond family planning.")

AcCrit might also draw attention to one putative opportunity cost of imported family planning program models: the preemption of home-grown analysis of demographic problems in the local institutional and cultural setting and of policy development informed by such analysis. China's antinatalist policies of the 1970s and 1980s are the preeminent modern case of a home-grown approach. (The matter obviously entails complex value judgments: The policies were not out of line with the general style of China's polity and administration, although they disregarded many of the liberal values that the "standard" program model would have insisted on.) On a much smaller scale, Bangladesh's apparent identification through the Matlab experiments of a means of undermining patriarchal opposition to birth control[17] is another, potentially significant, instance of an essentially home-grown design, even though the project itself was the work of an international agency.

These issues are in contention on the remaining regional battlefield of population policy, Sub-Saharan Africa. In a period of severe economic and health crisis and with continuing intractable problems of governance, public policy in Africa has little attention or political capital to spare for dealing with high fertility. But off-the-shelf family planning models, together with much of the requisite program funding, are available from the international community. Both the content and the packaging of these "lessons of experience"—even those emerging from such stellar sources as Matlab—warrant close and skeptical scrutiny. For example, AcCrit would surely seek to skewer those who, after 20 years of program effort in Kenya with no discernible result, now attribute an apparent downward movement in Kenyan fertility in the late 1980s to program effort.

AcCrit would probably also decry the continuing obsession with finding new methods of contraception, as if a technological solution to high fertility in the developing world were around the corner. He or she would be skeptical about whether a case resting on health and welfare benefits could long sustain the political base of family planning programs in the absence of an economic-demographic rationale, even though such skepticism probably underestimates the staying power of the family planning movement at its present size. (Family planners can perhaps be grateful for the historical accident that made fertility policy subservient to a Stopes/Sanger-type welfare activism.)

On the other hand, AcCrit would anticipate that before long, the now-ascendant revisionist case on the neutrality of population growth will itself be found wanting, for reasons such as its neglect of scale and its too-pat treatment of poorly understood environmental systems,[18] or for its reliance on methodology ill-suited to investigating what Paul Demeny calls the "demographic constitution" of society.[19] Emerging new theoretical paradigms in economics undermine the casual determinism implied in the not-to-bother scenario and call for greater provision against uncertainty.[20] Environmentalist attitudes in the rich countries may even develop to the stage of serious cognizance of the "deep" ecologists' critique of unthinking anthropocentrism, raising the ultimate constitutional issue of what proportion of the biosphere's energy flux should be preserved for the rest of the sentient or animate world.[21]

Berelson ends his 1975 essay by lamenting the repetitiveness and circularity of the debate. Although convinced that what was being done in practical population policy was the best under the circumstances, Berelson always remained open to new ideas and approaches that might offer better outcomes. However, his character AcCrit (who is, among other things, a political realist), upon observing the interests enlisted in the existing policy enterprise, would likely not have expected any change of direction; rather, he or she would have anticipated the continuation of "a developmental line that rapidly increases the gap between what man could be were he able to control his affairs and what he, in fact, is" [p. 136]. That would have been a correct call.

(Continued on page 150)

Books in Review

Cultural Aspects of Africa's High Fertility Rates

Reproduction and Social Organization In Sub-Saharan Africa
ed. by Ron J. Lesthaeghe, University of California Press, Berkeley, 1989, $50.00, 556 pp.

Reviewed by Donald F. Heisel

The persistence of high fertility in Sub-Saharan Africa is a major preoccupation of the international population community and of most people concerned with social and economic development in that region. Unlike most of the countries of Asia and Latin America, where fertility declines are well underway, only a few Sub-Saharan countries show even fragmentary evidence of declining fertility rates. Instead, population growth rates are reaching unprecedented highs. Policies intended to reduce fertility and slow the rate of population growth have been increasingly adopted by countries of the region, and highest priority is given to support for those policies by many of the concerned international, bilateral and nongovernmental agencies. But results so far have given scant grounds for optimism, and it is not clear how to effectively use the resources available to achieve the policy goals.

This book, edited by Ron Lesthaeghe, makes an invaluable contribution toward improved understanding of this persistence of high fertility. Lesthaeghe draws together the results of demographic analyses of fertility with the leading findings from the ethnographic literature on population-related aspects of social organization. After developing the theoretical framework, Lesthaeghe and his coauthors test it empirically, making extensive use of a data bank of ethnographic information (the Human Relations Area Files) to obtain social organization variables and the results of the World Fertility Surveys (WFS) that have been done in the region.

In an extensive review of theories of social organization in Sub-Saharan Africa relevant to reproductive behavior, Lesthaeghe draws extensively on work done by Ester Boserup, John Caldwell and especially by Jack Goody. He suggests in his first chapter that among the most salient of the unique social organization characteristics are the preeminence of the lineage as opposed to the nuclear family; exogamous marriage; the importance of women's labor in the low technology and low productivity setting of bush-fallow agriculture; and the widespread system of circulation of capital within the lineage on a relatively egalitarian basis according to need. These characteristics are strongly conducive to early marriage for women, followed by continual childbearing. Moreover, these social organization characteristics remain strongly effective in the face of the impacts of modernization and of Islam and Christianity.

In the following two chapters, Lesthaeghe and his coauthors test the theory against empirical data, examining the effects of both societal and individual-level variables on fertility behavior. In general, they demonstrate strong support of the theory by the data. They observe that socioeconomic development is consistently related to duration of breastfeeding, contraceptive practice and female age at marriage, quite independently of the ethnic group to which women belong. On the other hand, length of postpartum abstinence is markedly linked to group membership, with Islamic societies, those of Eastern Africa and the matrilineal societies of Ghana maintaining much shorter periods of postpartum abstinence than the other societies that were studied. Female education has an especially strong, but not direct, impact on childspacing. In general, the higher a woman's educational attainment, the shorter the period of postpartum nonsusceptibility. But the extent to which the shrinking duration of nonsusceptibility is compensated for by improved contraceptive practice is in turn positively related to the level of socioeconomic development of the society.

Turning to the analysis of the leading specific issues in Sub-Saharan fertility, Ulla Larsen analyzes the levels and differentials of sterility. Comparatively high levels of sterility are endemic in a number of countries of Central Africa and in some regions of East Africa. Basing her analysis on WFS data for Cameroon, Kenya and the Sudan, Larsen unexpectedly found that sterility has remained constant across cohorts during recent decades in Cameroon and the Sudan, and has risen in Kenya—at a time when average fertility has also increased. She observes that sterility levels are higher in urban areas, but that this does not appear to be due to migration of infertile women to the cities. Her estimate is that if sterility were reduced in Cameroon and the Sudan to the somewhat lower levels found in Kenya, total fertility in these two countries would increase by about 30 percent.

Three chapters are devoted to patterns of marriage; in one, Noreen Goldman and Anne Pebley provide an excellent methodological and formal demographic analysis of Sub-Saharan polygyny, showing that the very high levels of polygyny are sustained by the substantial age difference at marriage between men and women and the extent of widow remarriage. In the following chapter, Lesthaeghe, Georgia Kaufman and Dominique Meekers report on a detailed empirical investigation of the prospects for a nuptiality transition to later marriage for women or a decline in polygyny. They conclude that the traditional system shows every evidence of being quite robust. Pebley and Wariara Mbugua then examine the relationship

Donald F. Heisel is associate director, Department of International Economic and Social Affairs, Population Division of the United Nations.

between polygyny and fertility, and find little evidence to support the common impression that there is an inverse relationship, and in fact find no clear simple relationship at all.

Ian Timaeus and Wendy Graham then review the relationship between labor migration, marriage and fertility, drawing on the experience of Botswana and Lesotho. The large-scale (in Lesotho, nearly universal) migration of men to the Republic of South Africa for contract labor has impinged upon the stability of marriage but the traditional structure remains: Women continue to be responsible for childrearing, have restricted access to land, are excluded from inheritance and, in general, remain dependent on men. In net effect, male migration reduces the level of marital fertility by at least 10 percent, and possibly by as much as 25 percent.

The final major topic of investigation, child fostering—the rearing of children by persons other than their biological parents—is taken up in two chapters. Hilary Page presents a preliminary analysis of fostering, based on data taken from the WFS household questionnaires. The practice is widespread: Especially in West Africa, it is quite common to find a third or more of the 10–14-year-old children not residing with their mothers. The extent of fostering demonstrates the comparatively limited role of the nuclear family in the socialization of children. Caroline Bledsoe and Uche Isiugo-Abanihe report on an ethnographic analysis of how the practice works in one ethnic community. They provide a clear understanding of the perceptions and motivations of both biological parents and the foster mothers, or "grannies," to whom children (usually aged six and younger) are sent. They also show how fostering is an important mechanism of social and economic exchange between generations and between rural and urban areas.

In the analysis of empirical data, the authors draw upon the full range of multivariate analytic techniques. They are particularly effective in their handling of the relationship between societal and individual-level variables, but do not indulge in a display of analytic virtuosity for its own sake. The authors are careful to make clear the substantive implications of their methodologies throughout.

In a concluding chapter, Lesthaeghe thoughtfully appraises current prospects for a transition to lower fertility in Sub-Saharan Africa, with particular reference to whether the current economic crisis afflicting the region is likely to precipitate a decline. His conclusion is not very optimistic: He predicts only a modest decline in desired family size, limited to the more developed parts of the region, and a recurrence of Malthusian checks, including, but not limited to, the impact of the spread of AIDS. As a result, Sub-Saharan Africa will probably remain by far the most rapidly growing region of the world—with a rate not much below three percent per year well into the early part of the next century.

The book has some limitations. Perhaps the most important is that, as the authors recognize, much of the analysis is based on the experience of 10 or fewer countries, which are not representative of the approximately 45 states and territories of the region. But this, of course, is a problem that hinders all demographic research in Africa. Nevertheless, this book is certainly one of the most significant contributions to African demography in a number of years. It is essential reading for anyone concerned with population in Africa; it is recommended for anyone who wants to better understand the demographic trends and prospects of the modern world.

AcCrit: An Argument Yet . . .

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Manuscripts may be submitted in English, French or Spanish, and are read with the understanding that they neither are under consideration elsewhere nor have been published previously. All submissions are reviewed by the editorial staff and, if deemed of interest, undergo anonymous peer review. Manuscripts not accepted for publication will not be returned. Upon acceptance, all manuscripts are edited to the extent necessary to conform to the style of the journal. Authors will have two opportunities to review their article after editing. Authors must assign copyright to the journal.

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Manuscripts should be typed double-spaced, with all pages numbered and with a title page that includes the names and affiliations (at the time of the work reported) of all authors. Submissions should run no more than 30–35 pages, with no more than 7–8 tables; only one copy need be sent. Manuscripts should include a summary of up to one page in length.

Each table and chart should be on a separate page. Authors should check previous issues of *International Family Planning Perspectives* to gain an idea of how tables are to be styled. Authors must supply data points for all line graphs and charts; final art work will be done by the journal's staff.

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Olivia Schieffelin Nordberg
Editor-in-Chief
International Family Planning Perspectives
The Alan Guttmacher Institute
111 Fifth Avenue
New York, NY 10003
USA

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Younger Jordanian Husbands More Often Favor Family Planning, Joint Spousal Decision-Making

Nearly 40 percent of married men in Jordan do not believe in practicing contraception, and more than half believe that family size should be left up to God, according to the 1985 Jordan Husbands' Fertility Survey (JHFS).[1] Most couples in Jordan do not discuss family-size issues, but among men who support the idea of family planning, the vast majority believe such decisions should be made jointly by husbands and their wives. Positive attitudes toward family planning are more common among younger, urban and more educated men.

The JHFS was conducted as a follow-up to the 1983 Jordan Fertility and Family Health Survey (JFFHS), which measured fertility and family planning knowledge and attitudes of currently married women. The 1983 survey had found that the high total fertility rate in Jordan (6.6 lifetime births per woman) resulted from very short birth intervals (27 months), modest duration of breastfeeding (11 months) and moderate levels of contraceptive use (27 percent) among Jordanian women. Husbands of approximately 70 percent of the women interviewed in 1983 were located and, of these, 88 percent (2,433) participated in the JHFS.

The JHFS suggests that husbands' attitudes may be strongly linked to high fertility in Jordan. For example, 53 percent of the husbands surveyed believed that God should decide how many children they have. Thirty-six percent thought that both the husband and wife should make decisions about family size, 10 percent that the husband should decide and one percent that the wife should decide. The proportion who said that family size should be decided by God dropped from 75 percent among those who were illiterate to 28 percent among those with at least secondary schooling, and the proportion who said that both the husband and wife should decide increased from 12 percent to 57 percent, respectively.

In addition, the JHFS revealed that little discussion takes place between spouses concerning the number of children they want to have. Among husbands who believed that family size should be a joint decision, 41 percent said they had not discussed the issue with their wives. This proportion rose to about half of those who thought family size should be their decision alone and to 71 percent of the few who believed it should be the wife's decision.

Fifty-five percent of husbands responded to the question "If you could determine the total number of children you want in your life, how many would you have?" by saying that "God will decide" how many children they should have. Rural men were more likely to respond this way than were urban men (66 percent vs. 51 percent); this response was most common among illiterate men, decreasing to its lowest level among those with secondary education (79 percent vs. 31 percent). Men who said they left the decision up to God waited an average of 7.6 children, while those who wanted to decide for themselves desired 6.4 children.

The researchers also compared data from the 1983 JFFHS and the 1985 JHFS to determine whether women's childbearing intentions expressed in 1983 corresponded with their fertility during those two years. Two-thirds of the wives who said in 1983 that they wanted another child had had a live birth by the time of the 1985 survey, as had 30 percent of those who said they did not want any more children. Rural wives in both groups were more likely than their urban counterparts to have had an additional child.

World Fertility Survey data have shown that Jordan has the shortest average birth interval of any of the countries studied, the researchers observe. The 1983 JFFHS found that the average birth interval in Jordan was 27 months. In the 1985 JHFS, husbands were asked, "How old do you think it is best for a child to be before another child is born?" More than 60 percent of the husbands indicated that an interval of 25 months was ideal, and the average desired birth interval was 29 months. In contrast, husbands favored relatively long durations of breastfeeding: On average, they thought that breastfeeding should continue for 21 months, which is about twice the actual duration reported by wives in 1983.

In general, husbands surveyed in 1985 were less knowledgeable about contraceptive methods than their wives were in 1983, although more than 90 percent of both groups knew of the pill and the IUD. Wives were more likely to know of female sterilization (93 percent vs. 73 percent), and were (especially in urban areas) approximately 10 percent more likely than men to know of injections, male sterilization, withdrawal and the rhythm method.

Twenty-seven percent of both husbands and wives said they were practicing contraception at the time of the surveys. The IUD was the most popular method (used by 11 percent of couples in 1985 and eight percent in 1983), followed by the pill, sterilization and rhythm. Forty-three percent of all husbands said the decision to use contraceptives should be made jointly by the husband and wife (as did more than 50 percent of those under 40), 10 percent said the husband should decide and three percent thought the wife should decide. Nearly 75 percent of those who thought the decision should be made jointly had, in fact, discussed the use of family planning with their wives, as had more than half of those who thought the husband or wife should decide individually.

Nearly 40 percent of all husbands surveyed in 1985 said they did not believe in contraception, and this opinion was expressed by more than half of those who were over 50, poorly educated or living in

rural areas. However, only about one-third of urban men or men under 40 shared this view, as did only 15 percent of those with at least a secondary education.

Because such a high proportion of men are opposed to the idea of contraception, the researchers suggest that family planning programs in Jordan should increase the availability of male methods, include men in educational programs about population, health and contraception, and perhaps target younger men, who already have more positive attitudes toward family planning.—*M. Witwer*

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More Thorough Training Needed for Grass-Roots Family Planning Workers

Community-level family planning workers in five countries do not always have a thorough knowledge of the methods they dispense, nor do they consistently offer the widest possible range of methods, according to a survey of such workers in China, India, the Philippines, Sri Lanka and Viet Nam.[1] Basic questions on how methods work were often answered incorrectly; workers indicated that they often fail to point out the salient features of methods to clients, recommend all the appropriate methods or heed clients' own preferences. In addition, respondents appeared to emphasize the contraindications and side effects of methods more often than their benefits.

The study, which was conducted by the Economic and Social Commission for Asia and the Pacific (ESCAP), focused on family planning workers in China, India, the Philippines, Sri Lanka and Viet Nam, mainly because analyses showed that method mixes in these countries were limited. In each country, all levels of workers were interviewed (individual country reports were published in 1989[2]), but only the lowest echelon of paramedical workers prescribing and distributing contraceptive methods were used in the comparative analysis. In China, these were 440 family planning workers at the village and township level; in India, 133 health visitors and 556 nurse-midwives; in the Philippines, 227 midwives and 199 nurses; in Sri Lanka, 1,291 midwives; and in Viet Nam, 812 midwives.

The first part of the study, a test of general knowledge about various methods, included at least one question on each major method. For example, the main question testing pill knowledge was: "This method works by preventing the woman's egg from being released from her ovary." Sixty-six percent of grass-roots workers in China, 25 percent in India, 45 percent in Sri Lanka, 83 percent in Viet Nam and 37 percent in the Philippines replied correctly that this method was the pill. (Another 20 percent in the Philippines chose injectable hormonal contraceptives as the answer, which was also correct.) In most countries, the incorrect answer given was sterilization, which is a serious error, as that method does not interfere with ovulation. In India, the most common incorrect answer was the IUD.

A major question on the IUD tested whether workers knew it might cause menstruation to begin earlier, last longer and flow heavier; this was answered correctly by 84 percent of respondents in China, 83 percent in India, 76 percent in the Philippines, 78 percent in Sri Lanka and 93 percent in Viet Nam. Although a large proportion of family planning workers in the five countries answered this question correctly, the authors of the summary report comment that this is "fairly elementary knowledge, which anyone with a minimal acquaintance with the IUD should have had. The fact that so many of the respondents answered the question . . . incorrectly suggests that more training should be given on this method, especially in the Philippines and Sri Lanka."

The key question testing knowledge of the rhythm method concerned the timing of ovulation. Seventy-eight percent of workers in China knew that women were most vulnerable to pregnancy in the middle of their menstrual cycle, compared with 47 percent in India, 85 percent in Sri Lanka and 90 percent in Viet Nam, respectively. The authors of the summary report noted that "if family planning workers cannot answer the simplest direct question about the rhythm method correctly, it is unrealistic to assume that they can explain its complexities to ordinary clients, unless they receive a great deal more training."

A major question on sterilization asked if, after a woman has been sterilized, her menstrual periods will continue as before; remain unaffected, but with menopause coming earlier; or cease after a few months. This question was answered correctly (periods continue as before) by 87 percent of respondents in China, 53 percent in India, 92 percent in the Philippines, 92 percent in Sri Lanka, and 80 percent in Viet Nam. The authors stress the need for more thorough training on sterilization, especially in India, not only because this is the most widely used method there, but because one-third of Indian family planning workers thought that the procedure causes premature menopause.

A question on injectables—asked only in three of the countries—concerned delayed return to fertility after discontinuation. Only 34 percent of respondents in China, 41 percent in Sri Lanka and 21 percent in the Philippines answered correctly that injectables can delay return to fertility. This method is not widely used in China and the Philippines, but use is rising rapidly in Sri Lanka. Knowledge of condoms was tested by asking respondents to name the method that "works by preventing the man's sperm from entering the woman's vagina." The lowest percentages naming the condom were in India (79 percent) and the Philippines (80 percent). In a final question on effectiveness that listed a number of methods and asked which was the least effective, only 67 percent of the respondents in the Philippines chose the correct answer (the rhythm method); the most common incorrect answer was the condom.

A second section asked respondents what contraceptives they would recommend to hypothetical couples. Many workers deemed the IUD appropriate for a newly married woman delaying her first pregnancy (28 percent in India, 25 percent in China, 44 percent in Viet Nam), although it is not usually considered to be an appropriate choice by most family planning programs. Very few respondents would recommend traditional methods (rhythm or withdrawal) to this or any other hypothetical couple, although these methods are used widely in Sri Lanka and the Philippines and can be effective if used properly.

One hypothetical situation involved the following couple: The man dislikes condoms, and the woman does not want an IUD; they have one eight-week-old child; and they want to delay their next pregnancy. Despite the preferences clearly stated by the couple, 89 percent of family planning workers in India and 72 percent of family planning workers in Sri Lanka suggested the condom; 75 percent in India suggested the IUD. In each country, many family planning workers (58 percent in Sri Lanka) recommended the pill for this couple, even though most pill formulations would be inappropriate if the woman is breastfeeding.

For a couple with two children who do not want any more children and are will-

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ing to accept a permanent method, there were wide country-to-country variations in methods suggested. For example, female sterilization was suggested by 84 percent of workers in India, 91 percent of workers in China and 71 percent of workers in the Philippines, while in Sri Lanka the method most suggested was the IUD (84 percent) and in Viet Nam it was the condom (74 percent). The authors of the summary report note that these differences between countries are disturbing, as "couples at the same stages of their lives are essentially similar as far as contraception is concerned, no matter which country they live in."

The final section of the interview asked respondents to give all the important points about each method, as if they were describing it to a new client. (Data were available only for India, Sri Lanka and Viet Nam.) When discussing the pill, more family planning workers mentioned its side effects rather than its benefits: Seventy-two percent of family planning workers in India mentioned that the client might get headaches, but just 35 percent mentioned that it is one of the most effective methods. Similarly, just 17 percent and 13 percent of Sri Lankan family planning workers mentioned that only some women experience side effects with the pill or the IUD. The most complete information about the IUD was given by family planning workers in Viet Nam, where this is the most widely used method, but only 30 percent of Indian and 10 percent of Sri Lankan family planning workers mentioned that once it is in place, the IUD needs little further attention.

In all three countries, most of the workers failed to mention the most important points about the condom—that it is has no side effects, that for some men it dulls sensitivity and that it must be used correctly at every act of intercourse. Sri Lankan family planning workers only mentioned these points 27 percent, four percent and 16 percent of the time, respectively. Only 45 percent of Sri Lankan family planning workers mentioned that vasectomy is irreversible, only 67 percent of Vietnamese family planning workers said that female sterilization is irreversible and only 13 percent of Sri Lankan family planning workers mentioned that female sterilization does not affect the menstrual cycle.

In addition to showing a lack of knowledge among grass-roots family planning workers, the survey revealed a tendency to offer a limited choice of methods. Possible explanations for workers' biases are incentives, such as those offered for sterilizations in India and Sri Lanka; a lack of access to certain methods, such as in the Philippines (where some clinics do not offer a full range of contraceptives); and reluctance to deviate from past practice, such as Viet Nam's longtime reliance on the IUD. According to the investigators, family planning programs should place greater emphasis on training because "many paramedics . . . know too little about the basic properties of contraceptives and do not fully understand that couples should be left, as far as possible, to choose their own contraceptives."—*R. Turner*

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Steady Rise in Abortion Deaths in Rio de Janeiro Hospital over 10 Years

Abortion-related deaths accounted for nearly one-half of all maternal deaths in a municipal hospital in Rio de Janeiro over a 10-year period, according to a review of maternal mortality from 1978–1987.[1] The next most common causes were toxemia and hemorrhage, which were responsible for 19 percent and 13 percent of maternal deaths, respectively. Over the study period, abortion-related deaths increased by 172 percent, which suggests that the use of illegal abortion may have risen in this poor, urban population. Toxemia-related deaths also rose during the study period.

The researchers examined records of maternal deaths from January 1, 1978, to December 31, 1987, at the Municipal Hospital Miguel Couto. This emergency hospital is near one of the largest slum areas in South America, the *favela* Rocinha, and serves a universally poor patient population. As in other hospitals throughout Latin America, women presenting with abortion complications are admitted to the maternity ward, which designates 25 percent of its beds for such cases. Although exact information is lacking, the researchers estimate that less than 20 percent of all maternity patients receive any prenatal care.

Thirty-two maternal deaths occurred at the study hospital over the 10 years, for a maternal mortality rate of 177 maternal deaths per 100,000 live births for the period. Deaths directly related to pregnancy made up 82 percent of the total; these included abortion complications (47 percent), toxemia (19 percent), hemorrhage (13 percent) and infection (three percent). The remaining 18 percent of maternal mortality was the result of indirect causes, including cardiac arrest (six percent), respiratory illness (six percent), diabetes (three percent) and anesthesia accident (three percent).

The hospital's maternal mortality rate in 1987 was 462 maternal deaths per 100,000 live births, an increase of 268 percent from the 1978 rate (128 per 100,000 live births). Over the same period, the rate of abortion-related deaths rose by 172 percent, going from 85 deaths per 100,000 live births in 1978 to 231 per 100,000 in 1987. Removing the 15 abortion-related deaths from the total maternal mortality lowers the rate for the review period by almost 50 percent—from 177 maternal deaths per 100,000 live births to 94 per 100,000. Two-thirds of the abortion-related deaths were the result of illegal abortions performed during the second trimester of pregnancy, with sepsis diagnosed as the main cause of death. Uterine perforation with resulting sepsis and hemorrhage occurred in one-half of the second-trimester abortions that led to death. Deaths caused by toxemia also increased over the study period, although not as dramatically as those caused by abortion complications.

A total of 7,633 women were admitted to the Municipal Hospital Miguel Couto for treatment of abortion complications over the study period, representing 40 percent of all admissions to the maternity ward during that time. For the 10-year period, the abortion mortality ratio was 197 deaths per 100,000 abortion complications. The average length of stay among women who died from abortion complications was two days; one-third of these patients were in irreversible shock when they arrived at the hospital.

The experience of one municipal hospital in one urban center cannot be used to estimate maternal mortality trends

throughout Brazil, but the researchers surmise that the increase in abortion-related mortality suggests an increase in reliance on abortion over the past 10 years in this poor, urban population. Toxemia-related deaths also increased steadily over the review period and contributed nearly one-fifth of total maternal mortality. The investigators point out that toxemia can usually be prevented if it is recognized early and treated appropriately. But they admit that such adequate management is unlikely, at least at the study hospital, given their estimate that only 20 percent of women received any prenatal care. They conclude that "although the causes of death and solutions for prevention may vary from region to region, the common denominator for all involves improving access to health care for women."—*L. Remez*

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Support by Governments For Birth Control Rose Over the Past 15 Years

The nations of the world are more likely now than they were 15 years ago to state that their population growth rate is too high, that they are trying to decrease it and that they directly support the provision of family planning services, according to a United Nations report.[1] On the other hand, some nations (primarily developed countries) consider their population growth rate too low and their immigration levels too high, and the proportion who have undertaken some sort of effort to reverse these trends has increased over the past 15 years.

The United Nations Population Division has monitored the population policies of member nations on a regular basis since the mid-1970s. This information is collected from documents, speeches and other publications of the governments; official documents produced by various intergovernmental organizations; unofficial materials (from press clippings to journal articles); and official governmental responses to United Nations inquiries. Information on population policies has been available since 1974 for 156 member nations; however, in the intervening 15 years, 14 additional countries* have come under observation.

Of the 170 countries for which 1989 data were available, the proportion that regarded their population growth rate as too high was 40 percent, up substantially from the 28 percent that believed so in 1974. The increase was smaller when it was examined by population weight, however: Governments that considered their growth rate to be too high represented 59 percent of the world's population in 1974 and 64 percent in 1989.

Among the 156 countries monitored for the entire 15-year period, 63 percent had the same perception of their rate of population growth in both years. However, the shifts in governments' perceptions are more complex than this finding would appear to indicate. For example, 79 percent of the 43 countries that considered their growth rate too high in 1974 still held that belief in 1989, 19 percent considered their growth rate satisfactory and two percent considered it too low. Likewise, 62 percent of the 74 countries that thought their 1974 growth rate was satisfactory still thought so in 1989, but 31 percent of these had decided by 1989 that their growth rate was too high and seven percent that it was too low. Just 49 percent of the 39 nations that in 1974 had believed their growth rate too low still considered it too low, while 44 percent considered it satisfactory and eight percent perceived it as too high.

Over the 15-year period, the proportion of governments that were intervening to lower their growth rate increased from 25 percent to 35 percent. However, they represented 63 percent of the world's population in 1989, up slightly from 59 percent in 1974. The proportion of governments that said they were trying to raise their growth rate fell from 20 percent to 12 percent, and the proportion of people living in a country that was trying to raise its growth rate fell from 11 percent in 1974 to four percent in 1989.

Between 1976 and 1989, governments became more likely to have a policy designed to alter the growth rate by either lowering, maintaining or raising the nation's fertility level: The proportion with such a policy increased from 49 percent to 60 percent. The largest change was in the proportion of nations that had a policy of trying to reduce fertility (from 26 percent to 38 percent of all nations); the proportion that sought to increase fertility rose from nine percent to 12 percent, while the proportion that intended to maintain fertility level fell from 14 percent to 11 percent.

There was also a great deal of change in policy toward support of contraceptive services over the 15-year period: By 1989, only 57 percent of the countries had the same policy that they had in 1974. In 1974, 55 percent of the world's governments provided direct support (either financial or material) for the distribution of contraceptives; another 15 percent indirectly supported access to family planning services (such as by subsidizing nongovernmental organizations that disseminate information or provide services); 22 percent offered no support but did not hinder citizens' access to contraceptive services; and seven percent limited citizens' access to services. By 1989, 72 percent of governments were directly supporting contraceptive availability, and another 12 percent were providing indirect support; the remainder either offered no support but did not block access (12 percent) or hindered citizens' access to contraceptives (four percent). Support for contraceptive services is even greater when these proportions are weighted by population size: In 1989, 91 percent of the world's population lived in countries directly supporting contraceptive services, up from 83 percent in 1974.

Between 1976 and the present, 63–67 percent of the world's governments have considered their nation's mortality level "unacceptable," but no overall trend is discernable. However, the proportion of the world's population living in such countries fell during that period, from 79 percent to 62 percent.

Governments increasingly perceived immigration levels to be significant: The proportion indicating this rose from 24 percent to 39 percent over the past 15 years. In 1989, this view was held by 46 percent of developed countries and 37 percent of developing countries. Over the same period, the proportion of governments regarding current levels of immigration to be acceptable decreased from 87 percent to 76 percent. In contrast, the proportion of governments that perceived immigration levels to be too high rose from six percent to 21 percent. Furthermore, 32 percent of governments indicated in 1989 that they had adopted a policy of lowering the level of immigration, up from just six percent in 1976.

Perhaps because so many of the countries with significant levels of immigration were developed nations, the proportion of the world's population who in 1989 lived in a nation that considered immigration to be significant was just 25 percent, although it had risen from 14 percent in 1976. Likewise, 84 percent of the world's population in 1989, down from 93 percent in 1976,

*Angola, Antigua and Barbuda, Belize, Brunei Darussalam, Djibouti, Dominica, Kiribati, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Solomon Islands, Tuvalu, Vanuatu and Zimbabwe.

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lived in countries that considered immigration levels to be acceptable.

In contrast, there was little change in the proportion of governments that considered the level of emigration significant (33 percent in 1976 and 35 percent in 1989). However, the proportion of governments that thought current levels of emigration satisfactory fell from 83 percent to 74 percent over the same period, while the proportion specifically reporting emigration to be too common rose from 13 percent to 21 percent.—*M. Klitsch*

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Sterilization Decision Is Not Unduly Influenced By Cash Compensation

Cash compensation payments to men and women who elect to be sterilized appear to play a contributing role in their decision, but they rarely represent an overwhelming motivation, according to an in-depth analysis of the Bangladeshi compensation program.[1] Most men and women who became sterilized chose to do so largely because they wanted no more children, not because they needed the money. However, the payment of cash bonuses to people who referred others for sterilization created free-lance referral agents who did not always give people accurate information about sterilization. As a result of this analysis, the Bangladeshi government halted the use of referral payments for sterilization.

Compensation Payments

In 1976, Bangladesh initiated a system of compensation payments to help defray some of the costs for travel, food or lost wages that a man or woman would incur by choosing to be sterilized. (Cash payments to sterilization acceptors are common in the family planning programs of Bangladesh, India, the Republic of Korea, Nepal, Pakistan and Sri Lanka.) The payment consisted of 100 taka until 1983, when it was raised to 175 taka; the latter sum (equivalent to U.S. $5.50) represents a week's earnings for the average rural laborer in Bangladesh. Each acceptor is also given a new garment, to reduce the risk of postoperative infection. Beginning in 1976, a traditional midwife received a referral payment of 45 taka for each sterilization client she recruited, while other types of referral agents received a smaller payment. After 1983, anyone who referred a sterilization client was eligible to receive 45 taka.

Because of controversy over whether such payments serve as inducement to have an operation that a man or woman otherwise would not have, the World Bank and the government of Bangladesh commissioned a study of the issue in 1987. In the first phase of the study, investigators surveyed clients at a representative sample of sterilization providers; a two-person team visited providers unannounced and interviewed all clients during the following four days. Men were interviewed a few hours after their vasectomy, and women (who always stayed overnight after their operation) were interviewed on the morning following the operation. Over a three-month period in 1987, 638 men and 674 women were interviewed. In the second phase, a group of 587 married rural women who had had a tubal sterilization and had participated in a national contraceptive prevalence survey in 1985–1986 were reinterviewed, along with a group of nonsterilized controls who were matched by village, number of living children and desire to have no more children. In addition, focus-group discussions were held with current contraceptive users and nonusers and with family planning workers; the latter were also surveyed about their views on the system of compensation payments.

Ninety-four percent of sterilized respondents knew of at least one reversible contraceptive method; all knew before having the operation that it was permanent, and nearly all understood that it involved surgery. Respondents generally had discussed sterilization with a wide range of people, and only one respondent in 20 reported that his or her decision had been made primarily because of the persuasion of another person. Nine out of 10 vasectomy patients said they had discussed the operation with their wives, and four in five had waited at least one day before putting their final decision into practice, which indicates, the investigators comment, that "unilateral and sudden decisions to be vasectomized are not the norm."

Questions on sterilization patients' costs revealed that immediate out-of-pocket expenses averaged about 56 taka for the women and 22 taka for the men. A retrospective accounting of earnings over the two weeks preceding the operation revealed that women lost an average of 15 taka from 10 days of recuperation and men an average of 76 taka from four days of recuperation. However, women rarely work for wages in Bangladesh. When the researchers valued women's home labor at half that of men's daily wages, they calculated the economic loss from a 10-day recuperation period to be about 100 taka. The overall cost of vasectomy to the individual, then, was about 97 taka, while the cost of tubal sterilization ranged from 71 taka to 156 taka, depending on the value placed on women's labor.

"The average sterilization client," the researchers conclude, "has a small positive balance from the cash compensation of taka 175." They observe that such compensation "may be insufficient for some but handsome for others."

In response to a question about what factors influenced their decision to be sterilized, just three percent of female sterilization patients reported that money was a factor, compared with 12 percent of male patients. When asked whether their decision had been made primarily because they wanted no more children, because they needed the money, or for both reasons, 63 percent of the women and 47 percent of the men said it was because they wanted no more children, while smaller proportions (31 percent and 46 percent, respectively) said it had been for both reasons and relatively few (six percent and seven percent, respectively) said it was mainly for the money. The researchers conclude that "money may be a contributing factor to the decision to be sterilized in a large minority of cases (disproportionately men) but a dominant motive for a very small minority."

Results from the second phase indicated that sterilized women come from generally poorer families than do comparable nonsterilized women. Although higher income families might feel less of a need than poorer families to restrict family size, data do not support this possibility: Indeed, the better-off nonsterilized respondents were just as likely as poorer families to report that their most recent birth was unwanted or that they had too many children.

One could hypothesize that poor couples turn to sterilization because they have more trouble using reversible methods, but three-quarters of the sterilized women in the case-control study had never tried a reversible method. Furthermore, there

were no sizable differences in social or religious attitudes between sterilized and nonsterilized women, which undercuts a hypothesis that poor people are less restricted by social taboos on sterilization. Finally, poor women were no more likely to have been visited by family planning workers, although poor men were somewhat more likely to have been contacted by referral agents for vasectomy.

Because none of the hypothesized explanations for the higher levels of sterilization among the poor were supported, the researchers conclude that it is "highly probable that a major reason, though perhaps not the sole one, for the link between poverty and sterilization is the attraction of the compensation payment." However, more than nine in 10 participants in the case-control study said they would have been sterilized eventually even if there had been no cash payments. The investigators comment that rather than override reproductive motivation, compensation payments may act "as an additional spur to action."

Overall, the investigators conclude, "the evidence strongly suggests that [the payment system] exceeds its official purpose of compensation for costs associated with the procedure and that it acts as an inducement, particularly for men and the very poor. But this element of inducement only operates when there is an underlying strong desire to limit family size. . . . There is little evidence that the prospect of money entices poor couples into hasty, ill-considered actions they later regret." They recommend that the client-payment system be maintained because its removal would discriminate against the poor, who would find it difficult to meet even the relatively small out-of-pocket costs and wage losses arising from sterilization. However, they also suggest reducing the element of inducement by allowing inflation to gradually erode the value of the payment.

Referral Payments

The investigators also examined the effect of the referral payment of 45 taka. The survey data reveal that 40 percent of women, but only 15 percent of men, were referred for sterilization by a government fieldworker; 25 percent and 26 percent, respectively, were referred by someone from a nongovernmental organization, while 24 percent and 43 percent, respectively, were referred by a self-employed agent. Sixty-nine percent of the women and 55 percent of the men said that the referral agent accompanied them to the clinic.

The investigators observe that the small fees probably do not affect the advice of government workers: Such fees would rarely total more than 10 percent of their total income, and focus-group interviews with such workers indicate that they considered the fees minor. However, there was evidence that free-lance agents targeted lower income men and women who otherwise might not have elected to be sterilized at that time. For example, vasectomy patients recruited by self-employed agents were poorer and were more likely to give a monetary reason for being sterilized than those who were not. "The real significance of referral fees," the researchers conclude, "lies in the fact that they have fostered a large and often ignored army of unofficial, self-employed agents—particularly men who recruit vasectomy cases. . . . They represent a constant threat to the principles of even-handed access to all major methods and of fully informed consent."

Although the investigators observed that referral payments can play a positive role in some cases, they concluded that the payment of referral fees for sterilization should be eliminated. As a result, the government of Bangladesh discontinued such payments in 1988. At the same time, the U.S. Agency for International Development stopped reimbursing Bangladesh for the cost of all compensation payments.—*M. Klitsch*

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Togo's Birthrate Declines Slightly; Modern Method Use Remains Very Low

The total fertility rate in Togo is 6.6 lifetime births per woman, but recent data from the 1988 Togo Demographic and Health Survey[1] suggest a slight decline in both desired family size and fertility. The mean number of children considered ideal by women aged 15–49 is 5.3; those who have completed their childbearing have, on average, 7.1 children. Although 70 percent of married women in Togo say they approve of family planning, only one-third currently use a method of contraception and only three percent use a modern method. Most children in Togo have been vaccinated against at least one major childhood disease, but rates of infant and early childhood morbidity and mortality remain high: The infant mortality rate is 81 deaths per 1,000 births, and 85 per 1,000 children surviving their first year of life die before reaching the age of five.

Togo's population was estimated to be 3.3 million in 1988, with an annual growth rate of 2.9 percent. The urban population represents one-quarter of the total, with an annual growth rate of 4.4 percent (and 6.1 percent in Lomé, the capital), compared with 2.4 percent in rural areas; more than half of all urban dwellers live in Lomé. There are 40 different ethnic groups in Togo; the three largest are the Adja-Ewé (44 percent), Kabye-Tem (27 percent) and Para-Gourma (16 percent). The three major religions practiced are the traditional religion, animism (59 percent), Christianity (28 percent) and Islam (12 percent). Sixty-four percent of Togolese are nonliterate.

The Togo survey, or L'Enquête Démographique et de Santé au Togo (EDST), was based on interviews with a representative sample of 3,360 women aged 15–49. Thirty-five percent of the women were from urban households and 65 percent from rural areas; 45 percent were from the southern, coastal region of the country, which includes Lomé. Fifty-eight percent of the women in the sample had had no schooling, 29 percent had attended primary school and 13 percent had some secondary education. Only 33 percent were able to read.

Marriage and Fertility

At the time of the EDST, 73 percent of the women were in a marital union (defined as a generally stable relationship with cohabitation), 22 percent were single, slightly more than three percent were divorced or separated and fewer than two percent were widowed. Fifty-two percent of married women were in polygynous unions at the time of the survey. Polygyny is slightly less common in cities than in rural areas, and more common in regions with a large Muslim population. In the central region, where 47 percent of the population is Muslim, 61 percent of married women are in polygynous unions, compared with 47 percent in the plateau region, where 44 percent of the population is Christian. Rates of polygyny also are higher among older women and among those with little or no education. Seventy-two percent of women aged 45–49 are in polygynous unions, compared with about 40 percent of women aged 15–24; and the proportions of women in polygynous unions with no education, primary education and secondary education are 57 percent, 46 percent and 36 percent, respectively.

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The median age at first marriage among Togolese women is 18.4 years; it is slightly higher in urban areas (19.7) than in rural areas (17.9) and increases with level of education, from 17.8 among those with no schooling to 18.8 among those with primary education and to 22.5 among those with secondary education. By the age of 40, 99 percent of all women have been in at least one union, and more than one-third of married women have been in two or more unions.

First birth occurs at a median age of 19.3 years. Six percent of women have their first birth by age 15, 30 percent by age 18 and 50 percent by the time they reach 20. The median age at first birth is higher among urban women, especially those living in Lomé (20.5 and 21.5, respectively), and is also higher among women with either primary or secondary education (19.4 and 22.5, respectively) than among rural women and those with no education (18.9 each).

The total fertility rate (TFR) among Togolese women during the four years preceding the 1988 EDST was 6.6 lifetime births per woman, which may reflect a slight decline from previous years: The TFR for the period 1985–1987 was 6.5 births per woman, down from 6.9 in 1982–1984. In addition, the number of children ever born among women aged 40–49 is 7.1. The decline in fertility is more pronounced in urban centers. In rural areas, the current TFR and the mean number of children born to women aged 40–49 are 7.0 and 7.5, respectively; among urban women, the current TFR is substantially lower than the mean number of children ever born (4.7 vs. 5.8). The mean number of living children is 3.2 among all women, and 4.1 among those currently in union. Among all women, the mean number of living children rises from 0.3 among those aged 15–19 to 7.3 among those aged 45–49; these levels are slightly higher among married women. By the age of 45–49, 22 percent of all Togolese women have 10 or more children and more than 85 percent have at least five.

Traditional means of limiting fertility are still in place: Breastfeeding and postpartum abstinence are practiced for an average of 23 months and 18 months, respectively, and postpartum amenorrhea lasts for a mean of 14 months. However, shorter intervals for all three of these variables are found among urban and more educated women.

Contraceptive Knowledge and Practice

Knowledge of contraceptives appears high among women in Togo, although only a minority are able to spontaneously mention a family planning method. Ninety-one percent recognize a specific method of contraception after prompting, but only 38 percent are able to name one without prompting. Similarly, 79 percent recognize at least one modern method after a description is given, compared with just 26 percent who can name one spontaneously. The pill and injectables are the methods most often mentioned without prompting, while female sterilization is most often recognized after description. Eighty-four percent of women recognize a traditional contraceptive method after prompting, whereas 19 percent are able to name one spontaneously. Periodic abstinence and abstinence are the best-known traditional methods.

Hospitals are the most common source of modern contraceptives: Sixty-six percent of Togolese women say they would go to a hospital to obtain an IUD, 75 percent would go to one for injectables and 98 percent and 92 percent, respectively, would go to one for female or male sterilization. Pharmacies are most often named as a source for the pill (38 percent), spermicidal creams and jellies (43 percent) and condoms (47 percent).

When asked about perceived problems in using various contraceptive methods, women are most likely to report "no problems" associated with periodic abstinence (61 percent), female or male sterilization (55 percent and 51 percent, respectively), injectables (45 percent), condoms (42 percent), spermicides (38 percent) and the IUD (31 percent). Side effects are of primary concern in using traditional herbs (37 percent) and the pill (32 percent), and are often mentioned in association with spermicides (31 percent), the IUD (29 percent) and injectables (21 percent). One-quarter to one-third of all women say they do not know of problems associated with modern methods and 20–30 percent are not aware of any problems in using traditional methods (charms and herbs).

Sixty-seven percent of Togolese women say they have used a contraceptive method at some time; 11 percent say they have used a modern method and 64 percent a traditional method. The pill, the condom and spermicides have been used by about four percent each, one percent have used either the IUD or injectables and fewer than one percent have been sterilized. Abstinence is by far the most common traditional method (ever used by 49 percent of women), followed by periodic abstinence (23 percent) and withdrawal (12 percent).

Ever-use is higher among women currently in union (74 percent) than among all women, but this is a result of the larger proportion of married women who report abstinence as a method (59 percent). Although the proportion of women reporting ever-use tends to increase with age, the highest proportion (80 percent) is found among those aged 30–34. Women aged 15–19 are least likely to have used a method of contraception; in this age-group, only 36 percent overall and 47 percent of those currently in union report ever-use.

Thirty-three percent of all women in Togo are currently practicing contraception; 30 percent are using traditional methods and three percent are using modern methods. The proportions for current use among all women are similar to those for women currently in union, and women aged 30–34 report the highest levels of contraceptive use in both groups (about 40 percent). However, married women aged 15–19 are less likely to be currently using a method compared with all women in that age-group (17 percent vs. 22 percent). Women in union are somewhat more likely than women in general to rely on abstinence (22 percent vs. 18 percent) or the IUD (0.8 percent vs. 0.6 percent) and they are slightly less likely to practice periodic abstinence (six percent vs. 10 percent) or to use the pill, or the condom (0.4 percent vs. 0.6 percent for each method) or spermicide (0.6 percent vs. 0.8 percent).

Among women currently in union, rural women have a slightly higher level of contraceptive use than urban women (35 percent vs. 32 percent) because a higher proportion of rural women rely on abstinence (25 percent vs. 14 percent). However, urban women are almost twice as likely as rural women to use periodic abstinence (nine percent vs. five percent). Seven percent of urban women use modern methods, compared with only two percent of rural women. Contraceptive use increases with education and with parity, rising from 34 percent among women with no education to 42 percent among those with a secondary education, and from six percent among those with no children to 41 percent among those with four or more. Use of modern methods depends much more on education than on parity; two percent of uneducated women use mod-

ern methods, compared with 12 percent of those with secondary education, but modern method use only rises from two percent among those with no children to four percent among those with four or more.

The mean ideal number of children desired by Togolese women is 5.3. Nearly half of all women with five living children say they do not want to have any more, as do 65 percent of those with six or more children. (Among urban women and those with secondary education, two-thirds of women with four or more children say they want to limit their family size.) Overall, one-quarter of Togolese women do not want any more children, and nearly half say they would like to delay their next birth by at least two years.

Because of their desire to either limit family size or delay their next birth, 52 percent of Togolese women are considered potential users of contraceptives; however, only 22 percent of these women say they intend to use contraceptives in the future. One-third (35 percent) of all women at risk of pregnancy who are not using contraceptives say they do not do so because they want another child, while 22 percent attribute their nonuse to a lack of information about family planning and nine percent to a belief that contraceptive use would be bad for their health. However, 40 percent of all nonusers say they intend to use contraceptives in the future, and 72 percent of these women say they want to use a modern method. Most of these women are interested in using injectables (38 percent) or the pill (21 percent).

Although about 70 percent of married women say they approve of family planning and 37 percent say they believe that their spouses do as well, 63 percent of married women had not discussed family planning with their husbands during the year preceding the survey. Eighty percent of Togolese women approve of information about family spacing being broadcast on radio and television, as do even higher proportions of urban women, more educated women and those in their years of peak fertility, ages 20–34.

Maternal and Child Health

Rates of infant and child mortality remain high in Togo, but both have declined in recent years. The infant mortality rate decreased from 127 deaths per 1,000 births in 1961 to 107 per 1,000 births in 1973–1977 and 81 per 1,000 births in 1983–1988. The death rate among children aged 1–5 also decreased over the latter two periods, from 110 per 1,000 to 85 per 1,000. On average, women in Togo lose one child before age five per every five live births; the proportion of child deaths per woman increases from 11 percent among mothers aged 15–19 to 23 percent among those aged 45–49. Rates of infant mortality and, especially early childhood mortality, are highest in rural, poorly developed areas and among infants born to teenagers and to those with little or no education.

During the five years preceding the survey, only 17 percent of mothers received no prenatal care; more than 80 percent of all prenatal care consultations were provided by midwives or other female birth attendants. About 44 percent of births took place with no trained attendant present, including 10 percent of urban births and 56 percent of births in rural areas. Seventy percent of all pregnant women were vaccinated against tetanus—88 percent in urban areas and 64 percent in rural areas.

Mothers of children under five were asked whether their children had been vaccinated against tuberculosis, polio, tetanus, diphtheria, pertussis and measles; 88 percent of the children had received at least one of these vaccines, and about half had vaccination cards. Ninety-four percent of children aged 18–23 months had been vaccinated, as had 73 percent of those younger than six months.

Childhood diarrhea is a major problem in Togo: Fourteen percent of children under five had had diarrhea in the 24 hours before the survey, and 29 percent had had an episode of diarrhea during the preceding two weeks. Children in rural areas and those whose mothers had no education were more likely to be affected than children in Lomé and children of mothers with secondary education. Overall, only one-quarter of children suffering from diarrhea received medical attention, and only one in five were given oral rehydration therapy, even though 45 percent of all mothers claimed to know about it. Women with a secondary education were nearly three times more likely to provide oral rehydration therapy than were those with no education (43 percent vs. 15 percent). In contrast, 62 percent of children received some other treatment, such as rice porridge, and this proportion did not vary substantially among various subgroups of mothers.—*M. Witwer*

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